

**BARRIERS TO SYSTEMIC WORK STRESS
PREVENTION IN AUSTRALIAN ORGANISATIONS**

Richard T. Kasperczyk, BSc, GradDipAppPsych

**College of Law and Justice, Governance Research Program
Victoria University**

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ABSTRACT

This thesis addresses the question of why work stress prevention has not been adopted systemically in organisations, despite some research findings that it is effective, that it has been mandated by legislative regulations and that it has the potential for significant cost savings. Work stress is recognised as an increasing and global problem in terms of negative economic, health and social outcomes. Its significant costs related to work injury compensation have resulted in growing pressure from governmental health and safety jurisdictions for organisations to manage and prevent stress through systemic risk management approaches.

This thesis contributes to the advancement of knowledge and practice of work stress prevention through the creation and analysis of five original lines of enquiry comprising: (1) a review of meta-analytic studies published over 30 years to confirm the effectiveness of systemic interventions; (2) a review of Australian and New Zealand OHS regulations relating to workplace psychosocial health and their application in terms of prosecutions by enforcement agencies; (3) study of stress prevention approaches implemented by employers, through interviews with and surveys of HR managers; (4) exploration of managers' conceptualisation of work stress through interviews and surveys; and (5) case studies exploring prevention approaches in greater depth.

The original contribution that this research makes is identifying the factors currently hindering the implementation of systemic work stress prevention. This thesis challenges the assumption of the psychosocial risk management theory that workers' psychological health can be managed using traditional OHS frameworks. It concludes that managers' conceptualisation of work stress is incompatible with such approaches. Their cognitions, beliefs and attitudes toward work stress and intentions of implementing prevention programs are analysed in terms of the Theory of Planned Behaviour.

STUDENT DECLARATION

“I, Richard Kasperczyk, declare that the PhD thesis entitled Systemic Aspects of Occupational Stress is no more than 100,000 words in length including quotes and exclusive of tables, figures, appendices, bibliography, references and footnotes. This thesis contains no material that has been submitted previously, in whole or in part, for the award of any other academic degree or diploma. Except where otherwise indicated, this thesis is my own work”.

Signature:



Date: 31 May 2015

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1 Aims of the study and the research question

1.1 Introduction

Stress in the workplace is recognised as an increasingly significant and global problem in terms of negative economic, health, and social outcomes (EU OSHA, 2012; Kendall *et al.*, 2000). While there is a general agreement amongst business, practitioners and the research community – that the experience of stress has adverse consequences for workers and their employing organisations – it is less clear what can and should be effectively done to reduce these effects or prevent them.

Research in the area of stress in the workplace has to tackle definitional challenges. It is not entirely clear at times what the term ‘stress’ actually means as its definition lacks precision and can even be associated with opposite meanings. For example, stress can be conceived as a positive pressure needed to accomplish a task or alternatively a negative consequence of an adverse event. It can also be thought of as a stimulus in the environment, causing a negative feeling or response to that stimulus (Monroe, 2008). It nevertheless presents a real and contemporary challenge to all organisations as it is universally recognised as a common human experience. For the purpose of this study, work stress is assumed to mean: ‘the adverse reaction people have to excessive pressures or other types of demand placed on them’, the definition offered by the UK Health and Safety Executive, which has been the dominant source of data relating to stress in the workplace over the last decade in Europe and Australia (HSE, 2001).

Work stress has been linked to increasing direct labour costs related to workers’ compensation as well as indirect costs related to people outcomes such as unplanned absences, staff turnover and other inefficiencies. The current understanding of work stress, underpinned by extensive research into its causes, spanning four decades, has led to government regulations mandating a particular approach to managing and preventing stress, as a means of arresting the costs associated with psychological injury in the workplace (EU-OSHA, 2012; WHO, 2010).

The regulatory guidelines for managing stress in the workplace comprise a risk management methodology applied within the traditional OHS system (Comcare, 2008; OHS Service NZ, 2003; WorkSafe Tasmania, 2010; WorkSafe Victoria, 2007a). This approach is referred to, in this thesis, as the Psychosocial Health and Safety (PsHS) framework. Its fundamental assumption is that both physical and psychosocial elements of employees' health are compatible with each other and can be managed by a single system.

This thesis addresses the systemic prevention of work stress, within the PsHS framework, as distinct from individual approaches more common within the organisational context. Its focus is on empirically identifying the barriers to organisations adopting a systemic prevention approach, despite the available evidence that this approach is effective, there are legislative regulations mandating such frameworks, and the capacity to reduce costs. This research comprises several lines of enquiry: surveys, interviews and case studies. It investigates the extent to which current approaches to stress prevention in Australian organisations are systemic and consistent with managing traditional OHS. As theoretical concepts of work stress have advanced over the last two decades, they have been applied to legislative guidelines on the fundamental assumption that the risk of both physical and psychological health can be managed in the workplace using the same processes. This thesis challenges the validity of these assumptions and proposes some adaptations to the conceptual framework underpinning work stress prevention.

Managers' beliefs about stress are explored in terms of their compatibility with the prevailing assumptions of OHS regulations for managing stress in the workplace. The thesis comes to the conclusion that for its prevention to be effective, workplace stress must be recast in organisational and systemic terms rather than being treated in isolation. The conceptualisation of workplace stress amongst senior managers and Human Resource and/or OHS practitioners, in terms of its causality and responsibility for prevention, is a critical issue that current theoretical frameworks have not addressed.

While a growing body of research has identified organisational aspects of work and its environment as the dominant causes of workplace stress as opposed to single

factors, such as personality (Caulfield *et al.*, 2004), these findings have not had much impact on organisations' strategies for preventing and managing stress. Organisations find it easier to tackle workplace stress from the perspective of individual employees who are held responsible rather than their employers (Sanders, 2001). Research has also been focused on individual interventions and not sufficiently on multi-level organisational programs (Biron *et al.*, 2012; Martin *et al.*, 2014).

As organisations face pressures to maximise productivity and minimise costs due to increased global competition and rapid advances in technology, the resulting outcomes for their employees are greater work intensity and lesser job security (Dollard *et al.*, 2007; EU-OSHA, 2007; Leka *et al.*, 2011a). These global factors are believed to have produced a more stressful work environment, which it can be argued are beyond the control of organisational management. However, there are many other local management factors, such as unsupportive and laissez faire leadership styles, interpersonal conflict, and bullying and poor job design that have also been linked to high stress outcomes (Caulfield *et al.*, 2004; D'Aleo *et al.*, 2007; Dollard & Knott, 2004). All of these organisational elements can be assessed for their level of risk of potential harm and managed as such to reduce or eliminate the risk of work stress (Clarke & Cooper, 2004; Cox *et al.*, 2000; HSE, 2007). There is now growing evidence to suggest that adopting good management practices can prevent harmful stress for employees, and thus constitute an example of prevention measure at the organisational level (Bond, Flaxman & Loivette, 2006; Donaldson-Feilder, Lewis & Yarker, 2009).

The number of reports of effective prevention and intervention efforts and their quality currently available in the literature points to the paucity of systemic responses to the work stress problem at an organisational level (Cooper *et al.*, 2001; Kompier, *et al.*, 2000; van der Klink *et al.*, 2001; Nielsen, Taris & Cox, 2010). Despite the lack of evidence that organisations are using a systemic approach to workplace stress, there have been consistent research findings pointing to organisational and systemic approaches being more effective at preventing workplace stress than traditional approaches targeting individual responses to stress (Jordan *et al.*, 2003; LaMontagne *et al.*, 2006; LaMontagne & Keegel, 2012).

Further, there are many more evaluation studies of individual stress interventions available in the literature than those involving systems approaches demonstrating an apparent gap between research and practice in the real world and indicating a prevailing view that individual and personal factors predominantly contribute to work stress (Kendall *et al.*, 2000; Blewett *et al.*, 2006; Jordan *et al.*, 2003; Semmer, 2010).

In addition, few reported evaluative studies of prevention programs have been found to measure organisational outcomes (Jordan *et al.*, 2003; Richardson & Rothstein, 2008; Nielsen *et al.*, 2010). These organisational measures can involve either people related outcomes (e.g. rate of unplanned absences, staff turnover, or lost time incidents) or organisational performance (e.g. productivity, service quality, stakeholder satisfaction, or financial results) (Clarke & Cooper, 2004; Cotton & Hart, 2003). The paucity of clear links between organisational performance measures and workplace stress intervention could be one of the reasons for the low adoption of systemic approaches to tackling this problem. Other possible factors could include managers' attitudes to and beliefs about workplace stress. These reasons and their implications for theory and practice of work stress prevention are explored in this thesis.

While researchers postulate that systemic approaches to stress prevention have not been widely adopted, given the dearth of published evaluation research studies, the extent to which organisations have embraced systemic prevention in Australia is unknown (Caulfield *et al.*, 2004). In Europe, despite its more developed research and regulatory frameworks, the latest surveys amongst 21 participating countries have confirmed that the application of the directives relating to assessment and management of psychosocial risks has been considered inadequate (Iavicolo *et al.*, 2011). The barriers to organisations managing their psychosocial risks have been recently investigated in Europe as the significance of this issue has become recognised (EU-OSHA, 2012). There is no such research however available in Australia. This research develops a methodology for establishing the extent to which prevention is tackled systemically within organisations and explores the underlying reasons for its inadequate uptake. Psychosocial risks are defined by the International Labour Office (ILO) as interactive among job content, work

organisation and management with other environmental and organisational conditions, while employees' competencies and needs have had a hazardous influence over employees' health through their perceptions and experience (ILO, 1986). This definition is adopted here as it has been the dominant terminology used in Australian jurisdictions.

In light of the gap between research into workplace stress and practice in organisations, this thesis seeks to identify the incidence of systemic approaches to stress in Australian workplaces and discover the underlying reasons for their lack of adoption. It does so by investigating managers' conceptualisation of work stress, focusing particularly on their behavioural beliefs of whether the causality and responsibility for prevention is attributed to organisations or individuals. This thesis also investigates how the legislative processes relating to the psychosocial health of employees in Australia and New Zealand have been applied in various jurisdictions through prosecutions and penalties imposed for non-compliance in both physical and psychosocial health areas. It becomes evident that despite clear guidelines published by many OHS regulators, employers do not implement systemic approaches to work stress management and prevention consistently with management of work-related physical injuries.

It should be noted that while work stress research typically canvasses individual responses to stress factors or their causes, the focus here is on the organisational and more systemic aspects of prevention.

1.2 Rationale for the research

This research addresses prevention of the costly issue of workplace stress in both economic and human terms on a large scale. As such, its findings will have implications for policy at organisational, regulatory and societal levels that will potentially prevent significant costs in the workplace and negative health outcomes.

Despite the high volume of work related stress research over the past three decades, it has not translated into generating effective organisational stress prevention programs. As previously mentioned, current stress research mostly focuses on

experiences and causes for individual employees. There is inadequate knowledge about stress prevention in the workplace and the research dealing with stress prevention or intervention has emphasised the importance of individual factors, while relatively little study has been carried out in the area of systemic prevention. By focusing on systemic prevention this thesis goes some way to filling an important research gap.

This research also contributes to knowledge through its unique focus on managers' beliefs about workplace stress and its relationship to prevention programs prescribed by regulatory jurisdictions. Managers' fundamental assumptions of treating physical and psychosocial health issues in the workplace using the same system are questioned and explored. The increased knowledge of how these systems influence the implementation of stress prevention programs has significant potential for more effective facilitation of healthier organisations. Workplaces with improved health outcomes lead to better functioning communities resulting from more employees benefiting from positive aspects. Sanders (2001) is of the view that: "stress reduction at the organisational level will create healthier workers, organisations, communities and economies" (2001:265).

The cost of work stress is unacceptably high and, despite being preventable, the incidence of work stress has been increasing in the last decade. Research shows that systemic (organisational and primary) approaches to stress prevention are most effective, yet there is little evidence that organisations have been adopting such an approach – preferring instead to allocate resources to individual and secondary approaches (LaMontagne *et al.*, 2006). Organisations are reluctant to implement interventions addressing the causes of stress, instead focusing on alleviating the symptoms. There are few evaluation studies of systemic approaches to prevention, indicating that such programs are not implemented in many organisations, they are not being evaluated, or that such evaluations are not being published (Caulfield *et al.*, 2004).

This research has been designed to provide greater understanding of the reasons underlying the low adoption of systemic work stress prevention and intervention

programs. As the barriers to their acceptance are better understood, they can be more effectively addressed and removed.

In addition to these practical contributions, the research is expected to lead to a new conceptual approach to systemic aspects of stress reduction that will have a greater likelihood of being adopted in workplaces. As such, it will contribute new directions for developing healthy workplaces, providing evidence for future management of stress interventions, and implementing organisational change strategies and corporate governance standards.

1.3 Contribution to knowledge

While there has been a substantial body of research in occupational stress generated in the last few decades, its concept has been explored predominantly in the psychological domain and in isolation from other disciplines. This research will integrate the concepts postulated by organisational change, planned behaviour theory (Ajzen, 1991) and occupational stress.

Its original contribution to knowledge will include the re-interpretation of stress intervention programs utilising organisational change theoretical constructs, and in particular, the exploration of managers' beliefs within the context of stress intervention. These underlying beliefs and attitudes will be analysed in terms of their readiness for adopting change within the Theory of Planned Behaviour (TPB) framework. The behavioural beliefs of managers will be treated as precursors to the adoption of systemic stress prevention programs. Other research addressing this area assumes certain beliefs in relation to the causality and acceptance of responsibility for dealing with stress.

A unique feature of this approach is the conceptualisation of managers as change recipients rather than change agents. By adopting this interpretation, this research will add to the knowledge of organisational theory and of the factors currently hindering the implementation of systemic interventions aimed at preventing stress in organisations.

Its contribution to theoretical knowledge will be the adaptation of the Psychosocial Risk Management framework by incorporating new constructs of managers' attitude and organisational change contexts. This adapted model will have further implications for the practice and regulation of work stress prevention, and, it is hoped, will lead to a reduction of its negative health and organisational impacts.

1.4 Research aims and questions

This thesis focuses on the barriers to adopting systemic approaches to preventing or reducing occupational stress from organisational, management and regulatory perspectives. Most researchers agree that organisational approaches to stress prevention are scarce (e.g. Richardson & Rothstein, 2008). It is postulated that either they do not engage in systemic prevention programs or they do not report it. Thus, a key research problem addressed here is to identify and explore the underlying factors inhibiting organisations from adopting a systemic approach to stress prevention and integrating management of PsHS within existing OHS systems.

This thesis will argue that despite increasing research findings that systemic prevention is most effective and despite the regulatory attempts to mandate risk management approaches to stress prevention through OHS legislation, organisations have not adopted such programs because the theoretical frameworks underpinning such approaches have not taken into account the workplace decision makers' beliefs and attitudes. Further, evidence will suggest that managers' conceptualisations of stress are focused on individual causal factors, and their intentions to implement interventions are linked to their beliefs, in accordance with the TPB. It is argued that current assumptions of the PsHS theoretical framework do not adequately take into account the complexities of organisational factors (e.g. management of change, productivity pressures, and cultures and norms).

This research examines stress intervention in the workplace in terms of organisational and behavioural change theories. A Theory of Planned Behaviour and the concept of Change Readiness are utilised to examine managers' intentions of adopting systemic stress prevention programs.

The aims of the study focus on the following three research questions:

1. To what extent have Australian organisations adopted systemic approaches to preventing workplace stress?
2. Where they are not adopted, what are the underlying reasons for their low uptake in terms of organisational systems and managers' belief systems?
3. What implications do these underlying factors have for underpinning theoretical assumptions, employers and regulators in the management of psychosocial health in the workplace?

The preliminary assumptions that are tested and analysed prior to the study of organisational prevention approaches are as follows:

- (a) Effectiveness of the current research supporting the claim that systemic prevention approaches are effective
- (b) Legislative requirements and guidelines for managing and/or preventing work stress and management of their compliance by the OHS regulatory bodies.

These key research questions will be operationalised in the methodology chapter in more detail. As part of its inquiry, and in order to answer the above questions and fulfil the aims (as listed in the above research questions), the following objectives will be delivered:

- All the systemic elements of PsHS will be identified.
- The government OHS regulators' perspective will be explored in terms of their treatment of PsHS risks within the OHS regulatory system.
- Managers' dominant beliefs and their conceptualisation of stress will be interpreted through the integration of behaviour change and organisational health theoretical frameworks.
- A revised theoretical model of the PsHS will be proposed, taking into consideration the organisational contexts and change constructs.
- Implications for wider policy development, to overcome the barriers to organisations adopting systemic stress intervention programs and perceive them in organisational change terms, will be proposed.

1.5 Methodology overview

This thesis comprises five original lines of enquiry including empirical research to investigate the extent of systemic stress prevention approaches in the workplace and the underlying barriers to their acceptance.

First, the available meta-analytic studies published in the last ten years and spanning 30 years of stress intervention effectiveness were analysed in a structured literature review to determine the level of adoption of systemic stress prevention approaches and their comparative effectiveness to individual methods.

Second, a review of Australian and New Zealand OHS regulations relating to the management of workplace psychosocial health was undertaken. Their application, as expressed by prosecutions and penalties issued within selected jurisdictions, was also studied to reveal the differences in management of physical OHS and PsHS injuries.

Third, the organisational perspective was investigated with the view to determine how Australian organisations approach stress intervention, the extent to which these approaches are systemic and to identify barriers to their adoption. The data sources in this study included:

- i. interviews with HR or OHS managers;
- ii. reviews of available documentation of the selected organisations' policies and procedures in the area of OHS and PsHS;
- iii. surveys of HR or OHS managers; and

Organisations represented large and small organisations in government, private and not-for-profit human service sectors. The latter was selected due to the fact that the Victorian Government published guidelines for stress prevention in 2006-07, related specifically to this industry, (WorkSafe Victoria, 2007a).

Fourth, a series of qualitative and quantitative data sources were used to determine managers' conceptualisation of and beliefs about workplace stress, its causes, and approaches to prevention. Data were collected through interviews with senior line

managers and surveys of managers. The data were interrogated to determine the role of managers' attitudes, underlying beliefs, experiences and their intended behaviour in relation to the adoption of systemic prevention in their respective workplaces under their control.

The sample used in this study matched that described in the third study above in small, medium and large organisations within the three industry sectors. Entry into the organisations was gained through initial contact with the HR/ OHS manager who invited managers to participate in semi-structured interviews. The data set was then supplemented with information gained through surveys of managers within organisations representing the same sample characteristics.

The fifth study explored more in-depth experiences of attempts by organisations to adopt systemic stress prevention programs. Three case studies were selected from the organisations included in the above sample and described in more detail to illustrate various identified barriers experienced by those organisations in adopting systemic interventions.

1.6 Limitations in scope and assumptions

This thesis explores the extent to which Australian organisations have adopted systemic work stress prevention programs for which data is limited. There were no statistical or audit data sources available in any jurisdiction in relation to the level of voluntary compliance of employers managing their workers' psychological health. Available data relating to work stress is mostly limited to workers' compensation cases, following the incidence of injuries, rather than their prevention.

This thesis is necessarily limited in scope and coverage because of the timelines of candidature and constraints of travel for interviews. Much data has been sourced from Victoria and New South Wales. Due to time and resource constraints surveys were distributed by email and response rates were low, despite multiple follow-up communication. While the survey sample sizes were small (around 50 participants), they were broadly proportional to industry distribution. Also the

research findings relied on a number of triangulated data sources, yielding meaningful conclusions.

1.7 Structure of the thesis

This chapter presented the introduction and aims of the thesis including the rationale for the research, a methodology overview, and a discussion of its limitations.

Chapter 2 comprises an international review of the background literature relating to theories of workplace stress as well as its definitions, measures, impacts and causes. The relevant literature linking work stress and its prevention to organisational health, change and risk management aspects is also reviewed. That chapter also introduces the theoretical framework within which the results of the empirical studies are analysed, that is organisational health models and behaviour change theories, including TPB and Change Readiness. Their potential application to the conceptualisation of work stress intervention will be discussed. This overview of workplace stress concepts is summarised through the ontology map serving as a ready-reckoner type summary for this vast area of research.

Chapter 3 outlines the methodology and the research design in more detail for each data source. The multi-method approach utilising both qualitative and quantitative approach to this research is described along with the rationale for each of the selected five lines of enquiry. It provides a case for the adaptive theory approach chosen for the qualitative lines of enquiry in this research because of its capacity to build and broaden existing theory.

Chapter 4 presents the first line of enquiry (Study 1) relating to approaches to work stress interventions and their effectiveness. It commences with the background of the particular aspect of work stress relevant to this research – prevention and intervention. It includes the categories of various intervention approaches, their effectiveness, implementation and evaluations in practice. This chapter highlights key distinction between individual and organisational aspects of stress interventions. It reports the findings of a narrative meta-analysis (the first line of enquiry), namely

that organisational and systemic approaches to stress interventions are more effective than individual focused stress interventions.

Chapter 5 commences with more detail of the specific intervention model which has gained acceptance throughout most of the developed world in the last decade, referred to here as the PsHS framework. It includes an additional literature review of regulators' attitudes to prevention and managing stress in the workplace. Their repercussions for the beliefs and motivation of managers in implementing organisational change in response to identified stress risks are considered. It provides the results of the second line of enquiry (or Study 2), tackling the research problem from the regulatory perspective, namely the detailed comparison of legislative regulations related to the PsHS in Australia and New Zealand. This line of enquiry also includes a review of how the regulations, with respect to workplace psychosocial health, are applied in terms of prosecutions and penalties in comparison to the breaches of physical OHS regulations and serious physical injuries sustained by employees. Examples of similar systems and guidelines in the international arena are also presented.

Chapter 6 reports key study findings in relation to the incidence of systemic approaches in Australian organisations (the third line of enquiry or Study 3). This chapter provides the analysis of interviews and a survey of HR / OHS managers with the sample representing small, medium and large employers within the public, private, and not-for-profit sectors.

Chapter 7 explores managers' conceptualisation of work stress through analysis of the data obtained from interviews and surveys (the fourth line of enquiry or Study 4). It includes the discussion of the findings including the interpretation of managers' beliefs within the Theory of Planned Behaviour (TPB) framework. It also explores the implications of the findings for organisations and regulatory bodies in light of the regulations stipulating that psychosocial and physical injuries be managed using the same compatible system.

Chapter 8 includes the case studies of three organisations' experiences in introducing work stress interventions (the fifth line of enquiry or Study 5). These

case studies present a more in-depth analysis of the forces acting upon organisations toward implementation of work stress prevention and the barriers they face in their implementation. They illustrate and exemplify the findings of the previous quantitative surveys and interviews, identifying the issues acting as barriers to systemic and long-term implementation of such programs.

Chapter 9 presents an overall discussion of the identified barriers to organisations adopting systemic stress prevention drawn from all the sources of data analysed in this thesis. The gap between research, regulations and practice is highlighted in this chapter and explained in terms of the adapted theory of psychosocial health and safety. The implications for policy makers, regulators and employers are discussed for more effective management of work stress.

Finally, Chapter 10 concludes this study with a summary of the main findings from each chapter and lists major observations arising from empirical research and associated literature.

1.8 Summary

This chapter has introduced the aims of the study, described its contribution to knowledge and its significance to social and economic policy. The concept of work stress prevention and various approaches were introduced and the research problem defined. Research questions were articulated and an overview of study methods was provided and justified. The chapter has also outlined the structure of the thesis and the foundations of each chapter.

The next chapter presents a broad literature review relating to the thesis, commencing with the conceptualisation of work stress, its prevalence, theoretical models, its causes as well as theories and practice of work stress prevention. It needs to be noted that more in-depth literature reviews relating to the specific themes addressed by this thesis in the following relevant chapters.

2 Background literature review

2.1 Introduction

The first chapter introduced the research aims and the research questions. This chapter provides a summary of what is known about workplace stress since it has been the subject of much inquiry over many decades. It forms an outline of the preliminary literature search undertaken and provides the reader with a number of key concepts and theoretical background to the issues underpinning the systemic aspects of stress prevention. The chapter commences with an overview of the definitions and terminology used in the field of workplace stress before moving to the literature pertaining to the spread and impact of workplace stress.

The concepts presented in this chapter have been summarised in a figurative representation of the workplace stress ontology (see Figure 2-1 below) and represents key concepts related to occupational stress that have been produced by researchers over the past three decades.

2.2 Definitional challenges

When discussing work stress, the question of its definition immediately arises. Despite, or perhaps because of, a broad interest in the subject of stress resulting in a vast body of academic research and popular discourse, its reported meaning has become so diverse that it is difficult to discuss stress with clarity without first defining what it means (Kendall *et al.*, 2000).

There are many different ways in which the word “stress” is used. At least three general categories of definitions have been identified in the literature: as a stimulus from the environment; as a response to environmental stimuli; and as a stimulus-response relationship (Jex *et al.*, 1992). In other words, stress can refer to a cause within the environment or its effect on the individual. It can be either an input or outcome variable. If used as an outcome variable, in empirical literature, it is also referred to as ‘strain’ (Spector & Jex, 1998).

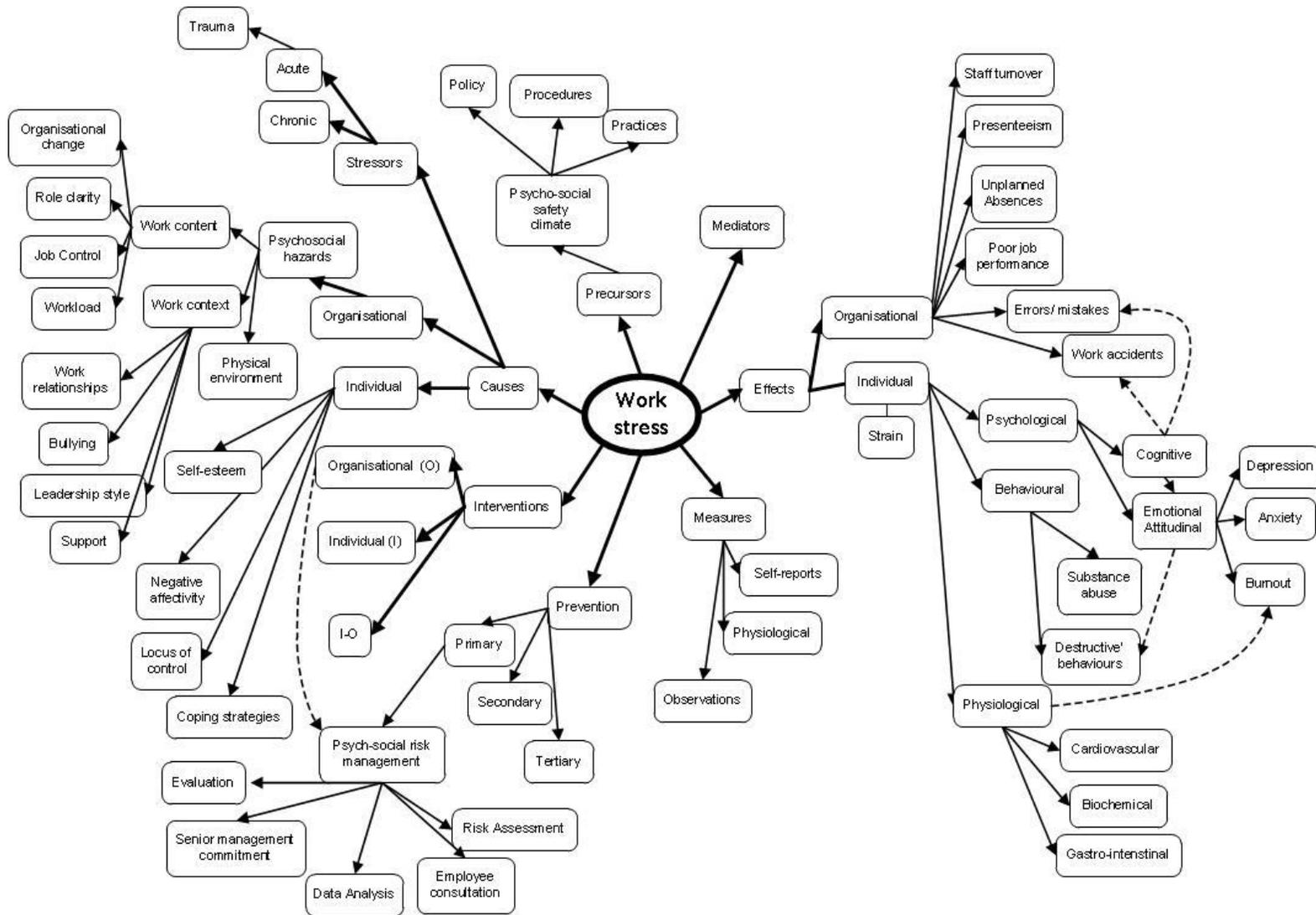


Figure 2-1 Work stress ontology risk

A lack of definitional precision of stress could stem from its conceptual beginnings in Selye's endocrinological research of the 1930s, where it was reported as the body's adaptation responses to various conditions and led to the term: *the general adaptation syndrome*. Selye (1978) also referred to stress as the body's *non-specific response; an unavoidable consequence of life; the wear and tear of life; and the spice of life* (Selye, 1974), creating a sense that it is so general that it cannot be defined in more precise terms. His pioneering ideas gave rise to a new area of research that has continued to advance and shape current thinking.

In addition to the definitional non-specificity of the term, a range of its characteristics also have roots in early Selye concepts, including its neutrality (or rather ambivalence between its positivity and negativity); its optimum level for healthy existence; its reference to the individual response; and the distinction between 'stress' and 'distress'. Selye's most concise definition of stress was stated as: "...nonspecific response of the body to any demand whether it is caused by, or results in, pleasant or unpleasant conditions" (Selye, 1978: 78). Selye conceptualised good or desirable stress, referred to as 'eustress', and bad or undesirable stress, termed 'distress'. Thus these terms can be perceived as positive or negative. It is perceived as positive when there is sufficient stress or pressure to challenge and motivate towards achieving a desired outcome and negative when excessive pressure causes harm (Kendall *et al.*, 2000; Selye, 1974). This is not evidenced as a common view as stress tends to be expressed in negative terms and the contemporary theoretical view of work stress is also to define it as a negative or unpleasant emotional experience (Cox and Griffiths, 2010).

As the experience of stress is common to human life in all its contexts, including work, everyone has a particular and personal view of its manifestations and causation. The meaning of this word is constructed from its representations in the research literature, public media, lay perceptions, individual experiences and ideology (Kinman & Jones, 2005; Lewig & Dollard, 2001). Thus, any intervention that aims at managing or preventing stress in the workplace needs to start with a conceptual agreement for it to be meaningful. There is a vast body of theoretical and applied research which has been steadily converging on an agreed framework and thus providing a useful basis for workplace interventions.

The UK Health and Safety Executive (HSE), a body that has been most prominent in raising awareness of the psychosocial risk management approach to managing work stress in Europe and worldwide, has offered the following definition of stress: “the adverse reaction people have to excessive pressures or other types of demand placed on them” (HSE, 2001: 1). At the time when HSE began to influence the way work stress was understood and managed in Europe, the United States’ Institute for Occupational Safety and Health also made occupational stress research one of its top priorities. Its working definition was that work related stress is caused when there is a mismatch between job requirements and the individual’s abilities, resources or needs (NIOSH, 1999).

The earliest comprehensive review into organisational approaches to stress prevention was conducted by Newman and Beehr (1979) who proposed the definition of stress as “a situation wherein job-related factors interact with the worker to change his or her psychological condition such that the person is forced to deviate from normal functioning” (1979:32). This definition includes an implicit belief that work factors have the potential to cause harm to individuals (Richardson & Rothstein, 2008).

Another commonly quoted definition attempting to provide more precision was offered by Lazarus and Folkman: “a disruption of the equilibrium of the cognitive-emotional-environmental system by external factors” (1984). While this definition points out the systemic nature of its causes, it is typical of a general phraseology that many such descriptions offer.

This thesis will assume these definitions matched closely to those proposed by the UK Health and Safety Executive (HSE, 2000). It is assumed to be a negative response of an individual to their work environment, affecting them physiologically, cognitively, behaviourally or emotionally. Organisational aspects with a potential to cause psychological harm are treated as hazards in this definition and stress will be assumed to be a negative adverse reaction to those hazards – warning signals of a possible psychological harm (or injury) which may develop unless the situation is altered. These definitions and HSE’s seminal work have greatly influenced or have

been wholly adopted by Australian regulatory bodies' guidelines (Comcare, 2008; WorkSafe Victoria, 2007a). The term 'psychological injury' will be used to indicate the harm caused by work stress which typically present as workers' compensation claims. These are interchangeably termed by various Australian jurisdictions as 'mental stress' or 'occupational stress'. It is also referred to by different jurisdictions as either 'psychological injury' or 'illness' (Kendall *et al.*, 2000).

The lack of precision with which the term stress is being applied is evident in the reporting of stress-related injuries and illnesses in the statistical data by national and state authorities such as the Australian Safety and Compensation Council (ASCC), Safe Work Australia (formerly, National OHS Commission, NOSHC) and WorkSafe bodies in various States. The reporting mechanisms of psychological injury are less precise when compared to physical injuries, as evidenced by twenty specific mechanisms of injury against which physical compensation claims being reported as opposed to the following four 'mental stress' causes: workplace violence, work pressure, harassment, and 'other' (ASCC, 2008). Other occupational injury statistical reports include only one 'mental stress' category without attempting to break down the mechanisms of injury into other categories (ASCC, 2007; WorkCover SA, 2010). Thus stress appears to be defined as both a cause and a type of injury indicating that the definitional challenges have not yet been overcome, even in government statistical reports.

Concerns about the lack of consistency in defining work stress have also been raised in relation to the workforce surveys used to estimate how prevalent work stress is perceived amongst employees in UK and Europe (there are no equivalent surveys in Australia). The questions used in these surveys produce a different range of stress prevalence rates. The survey items directly questioning perceived stressfulness on a 5-point scale, ranging from 'not at all stressful' through to 'extremely stressful' produced higher rates of prevalence than those asking a more general question about how work affected respondents. The UK self-reported work-related illness survey conducted annually considers stress in combination with depression and anxiety as a single item (Houdmont, Cox & Griffiths, 2010). These researchers in calling for more consistency and precision have concluded that "some variation is due to

wording that encourages interpretation of the question in terms of ‘exposure’ to work related stress as opposed to work having ‘affected’ health” (2010: 660).

2.3 Conceptualisation of stress in the workplace

2.3.1 Employees’ lay concepts of stress

Definitional challenges of work stress as well as its lack of precision have implications for workplace stress prevention programs. As the process of prevention is related to the perceptions of all participants (in particular managers, given their dominant role in such interventions), their perceptions of stress are especially significant. The type of intervention adopted by an organisation depends to a large extent on the dominant conceptualisation of stress amongst its management and employees.

The concept of stress held by employees influences their participation in any stress intervention and therefore process and outcomes. How such concepts are generated is therefore of interest to those planning intervention strategies in the workplace. The language of stress is readily accessible to the lay person, and as a result, its understanding is idiosyncratic and depends on the individual’s past experience. It is common for people, when asked to provide alternative terms for ‘stress’, to provide responses in terms of something else (e.g. ‘being under stress’, ‘experiencing pressure’). In other words, they view the term as an outcome or response to a stimulus. And most are expressed in negative terms and/or as symptoms (Sutherland & Cooper, 2000).

Lewig and Dollard (2001) have investigated the extent to which concepts of stress are constructed from media reports. Similar to other health issues, public understanding of stress is influenced by social and political interests of those who gather the information and by the media which disseminates it. Their analysis of representations of work stress in the Australian media reveals its “representation within the discursive frameworks of environmental causality-individual responsibility, as a public sector phenomenon, and as an economically costly epidemic” (2001:187).

In their analysis of how stress is conceptualised by employees, Kinman and Jones concluded that representations of occupational stress are

not naive beliefs about cause and effect, but sophisticated and multi-faceted. No clear consensus was found in how work stress was interpreted: participants referred to a diverse array of personal, environmental, and social factors when defining the concept and placed different weighting on the roles these factors play in the antecedents and outcomes of stress (2005:115).

Stress is therefore seen as an outcome of complex transactions between the environment and the individual; thus there were apparent parallels between lay accounts revealed in Kinman and Jones' study and theories of stress. Stress has become a general label for a growing number of workplace concerns, for example, Harkness et al. (2005) found that clerical workers in a Canadian city expressed their discomfort and experiences of feeling under-valued organisation through the discourse of stress as this was considered socially acceptable. Thunman and Persson (2015) used narrative analysis of Swedish public service workers' use of language of work stress and found that the workers justified their accounts by accepting responsibility for becoming ill, reflecting broader societal values of a public service ethos.

2.3.2 Managers' conceptualisation of stress

It is of particular interest in this research to consider whether the managers' concepts of stress are related to the types of interventions adopted by their organisations. One of the clues about the managers' views of stress prevention comes from the allocation of budgets for stress intervention programs within organisations. It appears that, despite research showing the cost-effectiveness of such programs, the budgets allocated to reducing and combating workplace stress are not commensurate with the level of indirect and direct costs, about which there is general agreement (Cooper *et al.*, 2001; Giga *et al.*, 2003).

Research conducted by Dewe and O'Driscoll (2002) provides a significant insight into the relationship between managers' conceptualisation of stress and their prevention behaviour. Having analysed the views of 540 New Zealand managers

on the outcomes of workplace stress and the extent to which their organisations were responsible for managing the effectiveness of various interventions, they reported that managers correctly identified various ways in which stress impacted individuals, work performance and the organisation. They also discovered that although most managers recognised that employees had “little” or “no” control over the factors that might induce workplace stress, 51% considered that the individual had ‘quite a lot’ or “total responsibility” for dealing with stress-related problems. It follows therefore the managers’ concepts of stress drive the selection of stress intervention programs, and that managers find secondary and tertiary approaches more appropriate than primary or systemic approaches (Daniels 1996; Dewe & O’Driscoll, 2002).

Managers’ views of stress also reflect the variances of theoretical models; however there is a clear discrepancy between the predominant transactional view of workplace stress and managers’ concepts. Sharpley and Gardner (2001), for example, having interviewed 36 senior managers, reported that over half of them perceived stress to be a response to workplace events, almost a third as a stimulus, or the events themselves. Only one participant was reported to define stress as a combination of reactions and events thus implying a stimulus-response relationship.

The study of Sharpley and Gardner (2001) also points to some potential contradictions between the managers’ reported knowledge and beliefs about stress and their views about stress intervention. In particular, their perception of employees admitting to experiencing stress as being ‘weak’ or unable to cope was contrasted with their belief that all employees should receive stress management training. This finding was consistent with the suggestion that employees believe that disclosing stress at work is likely to be perceived by management as an expression of vulnerability, weakness or incompetence (Harkness *et al.*, 2005). It is also consistent with the proposition by Barley and Knight (1992) that managers will tend to utilise a stress rhetoric that emphasises internal factors or individual failings, whereas individuals with lower occupational status will refer to the concept in terms of work environment factors.

Kinman and Jones (2005) proposed that

the individual uses lay beliefs, not only to interpret the nature of the threat a particular illness may pose, but also to determine the type of action she or he might use to mitigate this threat. Lay representations of workplace stress, therefore, are likely to have a profound impact on the individual's perceptions and experience of health symptoms and on determining the type of remedial action that she or he might take. The manner in which an individual conceptualises occupational stress may also influence their work-related actions, such as absenteeism, seeking promotion and turnover intentions (118).

They also offer a warning that the term 'stress' is often used throughout organisations not only by managers but also human resource personnel "without regard for the powerful and varied connotations it may hold for the individual" or the organisation within its particular culture (2005:118).

2.4 Prevalence of stress in the workplace

Despite its problematic and imprecise definition, stress is recognised as a real and universally recognisable entity in the workplace. Growing proportions of employees report that their health is negatively impacted by their experience of stress in the workplace. While in Australia it is most directly measured by workers' compensation costs relating to psychological injury claims, its impact is shared throughout the developed world (ASCC, 2008).

In Europe, work stress has been recognised as a significant health issue. Stress related problems at work are the second most commonly reported cause of occupational illness, following musculoskeletal injuries (Giga *et al.*, 2003). Surveys of workers in Europe, the UK and US have consistently found about 30% reporting that they find their work stressful (European Foundation for Improving Working Conditions, 2006; Jordan *et al.*, 2003; Murphy & Sauter, 2003). The European Foundation for Improving Working Conditions (2006) showed that in 2005, between 20 and 30% of workers believed that their health was at risk because of work related stress, and reported muscular pains. The European Agency for Safety and Health, when asked by the European Commission to identify key emerging risks and research priorities in occupational safety and health, identified

work stress and the psychosocial work environment as the top themes, followed by musculoskeletal disorders, dangerous substances and OHS management (EU-OSHA, 2005).

Over a third (36%) of US workers report that their jobs are 'often' or 'always' stressful (Jordan *et al.*, 2003; Murphy & Sauter, 2003). In the 2012 internet-based survey conducted by the American Psychological Association, two in five (41%) employed adults reported that they typically feel 'stressed out' during the workday. This percentage represented an increase from the previous year's survey, reporting 36% (APA and Harris Interactive, 2012).

In a general US population survey of stress, it was reported that work is the second most commonly cited source of stress (70%) following financial issues (76%). Job stability was also a significant cause of stress, reported by 49% of the sample (APA, 2010). There are many other personal sources of stress including the absence of work. As this thesis is concerned with work stress, other sources of life stress are not explored here.

There are no workforce stress prevalence studies conducted in Australia; however the levels of work stress are believed to be of similar dimensions (WorkCover NSW, 2006). There are also general population surveys indicating that 30% of Australians identified the workplace as a source of stress, with younger people more likely to report work stress than older adults. In particular, the group in 26 to 35 age bracket were significantly more likely to report the workplace as a source of stress (43%) (APS, 2011).

There is far less knowledge about work stress prevalence in the developing countries due to lack of available research. It follows, however, that as more work is outsourced from the industrialised parts of the world to the developing regions through work decentralisation, similar problems are likely to appear. A recent study found that psychosocial risks and work related stress issues are also becoming an emerging priority in developing countries (Kortum *et al.*, 2010).

2.5 Impact of work stress

There is a growing recognition that work stress is becoming a significant issue for employees, their organisations and therefore the wider society. Its increasing negative impact is measured in terms of direct costs as well as health and organisational outcomes.

2.5.1 Costs of workplace stress

The extent of the work stress problem can be readily measured in terms of direct costs of workers' compensation claims. In Australia, workers are entitled to claim for work-related injury including mental or psychological health, popularly referred to as 'stress claims'. The number of such claims has grown rapidly in the last decade. Despite recent initiatives in various compensation jurisdictions to reduce access to such claims, their costs as a proportion of overall compensation expenditure keep increasing. While the annual number of workers' compensation claims decreased by 13% between 1996 and, 2004, the 'mental stress' category of claims increased by 95% (from 4440 claims in 1997–98 to 8665 in, 2004–05) and since then there has been a steady decline to 5950 in 2007-08. Over the period 2003 to 2011, there was a 7% decrease in the number of accepted mental stress claims, however over this period claims in general decreased by 13% indicating a smaller improvement in mental stress claims than claims overall. (Safe Work Australia, 2013).

The median direct cost of mental stress was reported to be \$12,800 per claim, more than double that of all new claims (Australian Safety and Compensation Council, 2008). Between 2008 and 2011, claims involving mental stress consistently had the longest median time lost from work: 6.1 weeks, compared to 0.6 weeks for all accepted claims. Mental stress claims are therefore the most expensive form of workers' compensation claims because of the often lengthy periods of absence from work typical of these claims (Safe Work Australia, 2013).

Significant costs and incidence of stress have also been reported worldwide. Estimates from the United Kingdom Labour Force Survey indicate that self-reported

work-related stress, depression or anxiety accounted for an estimated 11.4 million lost working days in Britain in 2008/09 (HSE, 2010). According to the Fourth European Working Conditions survey, 20% of workers from the first 15 EU Member States and 30% from the 12 new Member States believed that their health was at risk because of work-related stress. The European Commission reported that the costs of work related stress was EUR 20,000 M in the 15 EU countries per year (EU-OSHA, 2012).

The total economic cost of work injury for the 2005–06 financial year was revised by the Australian Safety and Compensation Council, estimated to be \$57.5B, representing 5.9% of GDP for the corresponding financial year. As the number of new mental stress claims have been reported to be 6% of all claims, it is reasonable to assume that the overall cost of work-related stress in Australia is of the order of \$3.5B (ASCC, 2009). The costs to the Australian economy related to workplace stress are far greater than those directly attributed to workers' compensation. Research conducted into the cost of work-related stress in Australia found that there were considerable costs to employers due to both increased absences from work and presenteeism which were estimated to cost employers in Australia around \$10.1 billion per year, while the cost to the economy was around \$14.8 billion per year (Econtech, 2008). Presenteeism was defined as 'the lost productivity that occurs when employees come to work but as a consequence of illness, or other conditions, are not fully functioning' (Productivity Commission, 2010). Apart from and lower productivity additional costs to organisations relating to work stress include employee turnover, increased industrial accidents and lower morale (Caulfield *et al.*, 2004; Debruin & Taylor, 2006; Senol-Durak *et al.*, 2006). Further, social costs of work stress have been linked to poor physical health outcomes, mental health problems, mental illness and unhealthy behaviours (LaMontagne *et al.*, 2006).

2.5.2 Individual health outcomes

The significant negative consequences of work related stress on individuals' mental and physical health have been documented by numerous Australian and international research projects during the last four decades, for example, Stansfield & Marmot, 2002, Blewett, *et al.*, 2006; Kendall *et al.*, 2000. The most prominent

negative mental health outcomes of prolonged or sudden exposure to stressors include depression, anxiety disorders, psychiatric visits, burnout, emotional exhaustion and poor health behaviours (Dollard, 2002; LaMontagne *et al.*, 2006).

The evidence for physical effects has been derived from longitudinal studies showing links between some work factors considered to be stressors such as low levels of job control and an elevated risk of cardiovascular disease. Other physical symptoms thought to be associated with work stress include peptic ulcers, asthma, rheumatoid arthritis and obesity (Stansfield & Marmot, 2002 Dollard, 2002).

2.5.3 Organisational outcomes

The issues of mental and physical health at work have a direct impact on organisations through people's health outcomes such as unplanned absences, staff turnover and workers' compensation. It also impacts indirectly on organisational business outcomes such as productivity, efficiency, quality, profits and budgets through both higher people costs and lower morale or engagement (Cotton & Hart, 2003; Rick *et al.*, 2002).

Most stress research, and in particular stress intervention research, uses individual and self-reported measures of stress experience to evaluate the level of effectiveness of intervention programs. It could be argued that this is one of the reasons why the reliance of individual approaches to stress prevention prevails as managers' beliefs are shaped by the results of such studies. Few studies have included organisational outcome measures such as performance, risks or costs which are the more natural domain of management.

The literature review presented in the first five sections of this chapter commenced with the discussion of the definitional and conceptual challenges to work stress which are relevant to this research as it concerns itself with the managers' beliefs about work stress and prevention. It summarised the significance of work stress by providing prevalence data and its impact on individual health, economic costs and organisations. Next, the literature review to be presented in the following sections will tackle the theoretical frameworks of work stress, moving through to prevention and organisational aspects of change.

2.6 Theoretical models underpinning work stress research

The studies undertaken on the impacts of work stress have been underpinned by a variety of theories developed during the last five decades. Despite the volume this research has generated, or perhaps because of it, there are significant disagreements in the literature on the theoretical frameworks defining stress, methods of operationalisation, and scales to measure it (Cooper, Dewe & O'Driscoll, 2001). There has been a great deal of confusion surrounding the findings and their limited application in practice in the workplace. Work stress appears to have multiple origins and a number of conceptualisation theories have been developed. These in turn have led to different implications for practical interventions in the workplace reflecting the focus of each theory (Caulfield *et al.*, 2004).

A number of theoretical frameworks for workplace stress have been proposed over the years and they have been generally grouped into three categories: physiological, engineering and psychological. The first two were the early theories and the latter (psychological) approach is more contemporary and further distinguished by two focus areas: interactional and transactional (Jovanovic *et al.*, 2006). The transactional model has become dominant and leading to the development of risk management approaches to interventions (Cox and Griffiths, 2010). Each of these theoretical constructs will be discussed below.

2.6.1 Physiological response model

As noted earlier in this chapter, the beginnings of systematic stress research stem from Hans Selye's work demonstrating a physiological degeneration in response to the exposure to stress introduced by means of an environmental stimulus. His work built on the concept of 'homeostasis' introduced by a Harvard University physiologist, Walter Cannon. According to Cannon (1935), as the organism is presented with various environmental challenges, it responds to each new situation by adjusting various physiological systems to compensate for the expended resources, and thus returning it to the state of equilibrium. This concept explained the physiological reactions to threat involving the sympathetic nervous system's

activity, for example, respiration and an increased heart rate, which act as the body's compensatory response.

Subsequently, Selye, extrapolating his animal endocrinological research to humans, introduced the model of three stages of adaptation to the stressful stimuli, which he termed the 'General Adaptation Syndrome': alarm including a shock phase, resistance – to return the body to an equilibrium and collapse, if the exposure persists and the body has not developed resistance. The initial shock, or alarm phase involves a sympathetic – adrenal medullary activation. As the person then seeks to resist the stressor by making adaptations, it causes adrenal cortical activation. The final stage, in some circumstances leads to exhaustion, involving terminal reactivation of the sympathetic adrenal medullary system. If elicitation of this physiological response is repeated, it becomes intense or prolonged, increasing 'wear and tear on the body' and thus long-term stress-related diseases (Selye, 1978). From his perspective, the stress response was nonspecific as the type of stressor experienced did not affect the pattern of response. In other words, a wide variety of stressors elicited an identical or general stress response.

2.6.2 Engineering stimulus model

The stimulus model of stress was based on the concepts borrowed from physics and engineering disciplines, which assumed stress was a noxious characteristic of the work environment. It is also referred to as the engineering approach, conceiving stress in terms of the load of demand level placed on the individual, within the work environment. This demand is such that a disruptive force acts upon the organism in a manner that causes distortion (Jovanovic *et al.*, 2006). In this model, it was argued that stress referred to the objective characteristics of the environment and produced a strain reaction which, although reversible, could prove to be irreversible and damaging (Spielberger, 1976).

Early research and subsequent models treated stress as a physiological response to a wide range of harmful stimuli. On the basis of this model, research focused on identifying sources of stress in the work environment, particularly its physical characteristics such as lighting, exposure to heat or cold, and other working conditions such as social density and workload (Cox & Mackay, 1981). While it is

still a useful model to identify stressors in the workplace, its shortcomings were evidenced as the lack of objective definition of what constituted a stressful stimulus and its inability to explain individual differences in their response to the same stressful events (Jovanovic *et al.*, 2006).

2.6.3 Interactional models

While the early theoretical approaches have focused on stress as either a response or a stimulus, most contemporary theories of stress treat it as a more complex interaction or transaction. This approach is also referred to as a psychological model and focuses on the interaction between the work environment and the worker (Cox & Griffiths, 2010). A large proportion of past work stress research has been based on narrow theoretical models emphasising the individual's response to work factors rather than dealing with the complexity of an organisational context (Caulfield *et al.*, 2004; Morrison & Payne, 2003).

From the interactional perspective, the factors previously treated as stresses in the environment have been redefined as factors which can potentially cause a stress response, depending on the individual's interaction with these factors. A number of organisational factors relating to the work content (e.g. job design, workload scheduling) and its context (job control, interpersonal relationships, culture, leadership behaviours) have been linked to the level of stress experienced by workers (Cox *et al.*, 2000). The focus of this theoretical framework is on the structural features of the work environment and the person's interactions with the work environment. These theoretical models of work stress became the foundations for much research in this area and led to their further enhancement referred to as transactional. Both interactional and/or transactional models are described below in the chronological order of their development.

Person-Environment Fit

A theoretical concept of Person-Environment (P-E) fit gained prominence in the early 1970s. It led to much organisational research on job satisfaction, vocational choice, recruitment, selection and organisational culture. It has also contributed to

an understanding of job stress and led to the development of interactive and transactional models currently dominating the field. It is, in fact, still the underpinning construct for currently adopted definitions of work stress. The concept of P-E fit postulates that stress arises from a poor match between individual employee's characteristics (e.g. abilities, needs, behaviour styles) and the job (e.g., demands, resources, opportunities). Fit was described as the balance between desired and actual levels of various job conditions (Edwards, 2008; French & Kaplan, 1972).

There are further distinctions amongst the work stress theories based on the P-E concept. Some have focused on needs–supplies fit (Edwards, 1992), others on demands–abilities fit (McGrath, 1976), and later proponents integrated both (French *et al.*, 1982; Harrison, 1985). The needs–supplies fit reflects the degree to which the needs of the person are fulfilled by the environmental rewards. The demands–abilities fit reflects the extent to which needs of the environment are fulfilled by capabilities of the person (Edwards, 2008). These theories led to defining stress as “a substantial imbalance between environmental demands and the response capability of the focal organism” (McGrath, 1976).

One example of a series of studies demonstrating the effect of strain from the imbalance of demands was the finding that employees whose job complexity was either greater or less than their desired degree of job complexity, reported more depression than did employees whose degree of job complexity matched their preferences (Caplan *et al.*, 1975, quoted in Chemers *et al.*, 1985).

The important elements of the contribution of combined P-E fit theories can be summarised as follows:

- The variation in job strain is better predicted from measures of person-environment fit than from person or environment variables separately
- The imbalance that defines stress refers to demands/needs/capabilities of the employee, not as they exist objectively, but as they are perceived subjectively by them

- The demands and abilities must be perceived to produce stress, and to be perceived as important by the person
- Perfect fit occurs when the person and the environment are equal
- Misfit between demands and abilities leads to greater stress when the consequences of misfit are considered important by the person
- The objective and subjective person and environment are influenced by the person's coping and defence, as well as the accuracy of their self-assessment (Edwards, Caplan & van Harrison, 1998).

A number of weaknesses in the P-E theories have been recognised, for example, they assume a static position of the individual's personality traits rather than a dynamic interaction process (Sutherland & Cooper, 2000). There are also limitations with defining accurately its key constructs such as demand, variously defined as load, input, stressor, environmental force, or the degree to which a favourable or an unfavourable outcome results from task performance. Needs in turn are interchangeably referred to as desires, values, motives and goals, which refer to different concepts (Edwards, 2008).

Partly as a result of these limitations and despite considerable research and theory development, Person-Environment Fit theory has failed to add much focus to the area of stress and there have been calls for researchers to add more specificity to its key constructs such as 'fit' and the content of person and environment (Chemers *et al.*, 1985; Edwards, 2008).

Demand - Control - Support

The most widely currently accepted work stress model within the interactional framework is the demand-control model (Karasek, 1979). This model postulates that low job control combined with high job demands generates job strain, which has been most widely used as a measure of job stress in terms of, for example, poor health outcomes, job anxiety or exhaustion. A different relationship between these two factors is that high job control and high demands have been found to have positive health promoting aspects (Karasek & Theorell, 1990).

Job control is defined by Karasek as “the working individual’s potential control over his tasks and his conduct during the working day” (1979: 289-290). Under this model’s premise, individuals experience job strain if they cannot decide for themselves how to meet their job demands. According to Karasek, “the individual’s decision latitude is the constraint which modulates the release or transformation of ‘stress’ (potential energy) into the energy of action” (1979: 287).

Using the measures of ‘job strain’ operationalised as the interaction between job control and job demands, research has provided growing evidence of negative impacts of work on employees’ physical and mental health. Adverse work experiences have been referred to as ‘stressors’. Such negative experiences are assumed to cause employees strain and produce negative health outcomes. A vast amount of research has used the stressor-strain relationship by correlating the stressors with indicators of psychological distress (Blewett *et al.*, 2006; LaMontagne *et al.*, 2006). For example, human service industry jobs combining high demands, low control and low support produced the lowest levels of satisfaction in workers. High demands and low support were associated with high depersonalisation and high emotional exhaustion (Dollard, 2002).

While the Control-Demand model has been used to predict negative health outcomes, particularly cardiovascular disease in many occupations, there were criticisms levelled at the model because of its simplicity and exclusion of other factors (Bakker & Demerouti, 2007; Jovanovic *et al.*, 2006). The model was expanded to include ‘social support’ (Karasek & Theorell, 1990) which was found to act as a buffer against possible adverse health effects of excessive psychological demands. This model has distinguished between low and high social support work situations in addition to job control. The resulting ‘Demand-Control-Support’ model has increased its usefulness in predicting health outcomes (Theorell & Karasek, 1996).

Dynamic Equilibrium

Another theoretical framework that has recognised the complexity of work stress, proposed by Heady and Wearing (1989), was referred to as the Dynamic Equilibrium theory. According to this theory, work stress is related to a broad

system of individual and organisational variables, and as such cannot be found in either set, in isolation. Work stress occurs when a state of disequilibrium exists within the system of variables linking people to their environment, which causes a change in their normal levels of psychological wellbeing. The equilibrium state is defined as a normal state of functioning and wellbeing.

This theory was used as a framework for analysis in specific job related stress and wellbeing, giving rise to the organisational health model (Cotton & Hart, 2003). Its key assumption was that since work stress is a complex construct it cannot be assessed directly. Rather it can be understood by assessing a complex system of variables and determining their interrelationships over a period of time (Hart, Wearing & Heady, 1995).

Effort-Reward Imbalance

Another popular model used by researchers to study the effect of stress in the workplace is Siegrist's Effort-Reward Imbalance model. It conceptualises stress in terms of social reciprocity or social exchange at work. Social reciprocity is characterised by mutual and cooperative investments based on the norm of return expectancy where efforts are equalised by respective rewards. The model of effort-reward imbalance postulates that failed reciprocity resulting from a violation of this principle generates negative emotions and stress responses. The resulting imbalance, and therefore stress, occurs under high cost and low gain conditions. Conversely, positive emotions evoked by balanced social rewards promote health and wellbeing (Siegrist, 1996).

While the Siegrist model of stress has been particularly applied to workplaces, it has been increasingly researched in the wider context of a social contract in other settings. According to the model, rewards are distributed by three transmitter systems: money, esteem and career opportunities including job security. The imbalance between high effort and low reward is maintained under three conditions: (1) employees have few alternative options of other jobs; (2) employees accept the imbalance for personal or strategic reasons such as future promotional prospects; and (3) employees experience excessive work related commitment or 'over

commitment' because of inaccurate perceptions of their cost-gain ratio (Siegrist & Theorell, 2006).

A growing number of reviews have found that this model explained significant variance in health related outcomes. Links between each of these elements and employee's health has been established including health outcomes (e.g. cardiovascular disease and psychiatric disorders) and organisational outcomes (e.g. sick leave or staff turnover) (Stansfield & Marmot, 2002; van Vegchel *et al.*, 2005).

Job Demands-Resources

Another theoretical development that has gained prominence in the last decade is the Job Demands-Resources model (Demerouti *et al.*, 2001) expanding the concept of resources introduced by both Demands-Control-Support and Effort-Reward Imbalance models. Whereas the first of these was primarily limited to decision latitude and social support, the second was limited to intrinsic and extrinsic rewards such as salary, esteem and career opportunities. The Job Demands-Resources model assumes instead that each occupation has its specific risk factors, and they can all be categorised into job demands and job resources. It refers to job demands as the physical, psychological, social or organisational aspects of the job that require sustained effort or skills. Job resources refer to those aspects of the job that are functional in achieving work goals, reducing job demands and associated physiological and psychological costs, and/or stimulate personal growth, learning and development (Bakker & Demerouti, 2007; Demerouti *et al.*, 2001).

This model proposes two underlying processes in the development of job strain and motivation. The first leads to health impairment and takes place through job demands which exhaust employees' mental and physical resources. The more resources are required to protect job performance the greater the physiological costs for the individual. The second process proposed by the Job Demands-Resources model is of motivational nature, assuming that job resources have a potential for motivation leading to high engagement and performance. This model also postulates that there are interactions between job demands and resources for the development of job strain and motivation. As such, it is also consistent with the

other models; however it expands the list of variables predicting these outcomes (Bakker & Demerouti, 2007).

Transactional model

The transactional approach to understanding stress focuses on the process of interaction between the individual and the environment rather than its structures. It postulates that the stress process involves a sequence of events that includes the presence of demand, evaluative processes through which the demands are perceived as significantly impacting on the individual coping resources; and the generation of a response that affects the individual's wellbeing (Mackay *et al.*, 2004). In other words, there are three separate elements that can be identified and measured and they are:

- sources of stress existing in the environment;
- moderators or mediators of the stress response; and
- outcomes of exposure to a source of stress (Cox & Mackay, 1981; Sutherland & Cooper, 2000).

The transactional model of work stress has dominated the most recent developments in the area of occupational health since the 1990s. They assume interactional structures but the transactional theories differ at the micro level, in that they emphasise the dynamic interaction between the individual and the environment. Some argue that transactional theories have supplemented the early interactional models in their focus on ever changing relationships in that interaction (Cox & Griffiths, 2010). Key theoretical models identified as transactional and providing the foundations for the development of risk management approaches to stress interventions are described below.

An influential building block of the transactional theoretical framework was provided by Lazarus and Folkman (1984), who proposed that stress results from an 'imbalance between demands and resources' and therefore occurs when 'pressure exceeds one's perceived ability to cope'. Thus stress was thought of as a transaction caused by the individual's appraisal of the initial stressor. Three types of cognitive appraisal were hypothesised in determining the magnitude of the stress reaction: primary appraisal, secondary appraisal and reappraisal. Primary appraisal was based

upon the degree to which a person detected a stressor as being harmful (leading to potential injury or illness), threatening (causing anxiety, fear or damage to self-esteem), or challenging (leading to potential gain or growth). Thus it overtly recognises the subjective experience of the environment.

This theory treats stress as a transaction in that it is “neither in the environmental input nor in the person, but reflects the conjunction of a person with certain motives and beliefs with an environment whose characteristics pose harm, threats or challenges depending on these personal characteristics” (Lazarus, 1990: 3). It recognises that a degree of individual variation will exist due to stress being a process of transaction between the person and the work environment, thus explaining why some conditions are experienced as stressful by one person and not by another (Cox *et al.*, 2006).

The development of stress management programs leading from this theoretical concept focused on improving the individual’s coping ability, since stress was not considered a direct response to a stressor, but rather the individual’s appraisal of their resources and ability to cope and, as a result, mediate the stress response (Cox & Griffiths, 2010). Cox’s team in the UK built on the model of the US team of Lazarus and Folkman, by emphasising the individual’s perception of situations and events and of themselves, which gave rise to intervention methodology valuing the contribution of individual employees through their participatory input. Their conceptualisation of the stress appraisal process was further developed, as a basis for a practical risk management approach to stress prevention at the organisational level, through positioning the work stress process within a traditional occupational health and safety framework (Cox & Griffiths, 2010; Cox *et al.*, 2006; Jovanovic *et al.*, 2006).

2.7 Causes of work stress

Work stress causes can be generally grouped into two categories: individual and organisational. This section presents research findings related to each of these and then identifies formal mechanisms of work stress employed by the statistics gathering of national OHS bodies. Workplace bullying as a cause of work stress has

also been specifically researched in light of its recent prominence in the general media and academic literature.

2.7.1 Individual factors

The early years of research focused on the causes of stress resting within the individual, particularly certain personality traits attributed to some people's predisposition to perceiving certain events as stressful, finding it difficult to manage such events and taking longer to recover from their negative effects (Ganster & Schaubroeck, 1991; Watson & Pennebaker, 1989). Such personal factors were also purported to increase the individuals' susceptibility to situations resulting in negative experiences or emotions (George, 1992).

Personal factors identified as relating to individuals' vulnerability to work stress include: ingrained personality variables, cognitive, behavioural or affective response styles; and access to practical or emotional resources (Kendall *et al.*, 2000). The most prominent of these factors identified in early research was the individual's general tendency towards negative responses irrespective of the type of stimuli experienced in their environment. This general tendency, called negative affectivity, referred to a "broad range of aversive mood states including anger, disgust, guilt, fearfulness and depression" (Watson & Pennebaker, 1989: 234-5). This is believed to be a stable disposition towards a negative mood-state.

The proposition that individual employees vary in their vulnerability to stress was attractive for organisations that saw the potential of weeding out vulnerable employees and recruiting hardy ones, and thus minimising their exposure to work stress and workers' compensation costs. It was also attractive in that if the vulnerable individual employees could be reliably identified, appropriate interventions could be developed to assist them in coping with work stress, or they could be removed during recruitment and selection processes.

It has been noted that individuals vary in their experience of stressful events and environments demonstrated, for example, in research showing that those who are

high on negative affectivity tend to over-report the intensity of stressors. However, the evidence that people react differently to the causes of stress based on their personality is not strong. In fact, “the little existing evidence that addresses this question is contradictory and appears to be so small in effect that it is of little practical use” (Bright, 2001: 58).

It has also been acknowledged that some personality conditions may be associated with reduced personal and vocational functioning, which can lead to stressful employment conditions, such as the experience of interpersonal conflict with managers and/or peers. While work can aggravate a pre-existing personality disorder or accelerate its manifestation, it cannot cause a personality disorder (Cotton, 1996).

Overall, there are a number of individual differences that have been acknowledged to play a role in the experience of stress and they have been generally classified into the following three broad categories:

- genetic;
- acquired; and
- dispositional.

While genetic and dispositional factors are generally considered to be stable traits or characteristics of the individual, those acquired during the person’s lifetime can change. The factors in each of these categories are detailed in table 2-1.

Table 2-1 Individual difference variables

Genetic	Acquired	Dispositional
<ul style="list-style-type: none"> • Gender • Intelligence • Physique • Age 	<ul style="list-style-type: none"> • Social class • Education • Social support • Job position • Marital status • Financial status 	<ul style="list-style-type: none"> • Negative Affectivity/ • Neuroticism • Type A • Locus of control • Coping style • Self-esteem/ self-efficacy • Hardiness

Adapted from Bright (2001) and Kendall *et al.*, 2000.

In addition, conflict between work and home/ family demands has also been identified as a significant personal factor that can influence one's perceptions of work stress. Demands associated with family or personal finance have been identified as a major source of extra organisational stress that can complicate, or even precipitate, workplace stress (Lasky, 1995, quoted in Kendall *et al.*, 2000).

It is recognised that family and work demands are interrelated to the extent that experiences in one area affect the quality of life in the other. The experience of work stress in conjunction with, or in close timing with, the experience of chronic stress in personal life is likely to have the impact of depleting the level of psychological resources the person can devote to dealing with a work related event (Kendall, 2000). Hence, the level of work/life balance and associated support at work plus reciprocal support for work demands at home have been included as stress factors in many current assessments of work stress.

Overall, the individual factors, while acknowledged to have an influence over the experience of stress, are less practical for organisational interventions. When applying the transactional model of work stress, individual factors play an important role in the appraisal process and as moderators rather than causes of work stress.

2.7.2 Organisational causes of work stress

While there are different theoretical lenses through which stress is viewed, there is increasing agreement amongst researchers that specific job factors or work environment factors more strongly predict work stress and resulting mental health impacts than individual factors such as personality traits (Caulfield *et al.*, 2004).

The combined list of work factors, now known to contribute to the experience of work stress, has been variously grouped into two categories relating to work content and work context. The following key factors have been identified in each of these categories (adapted from Cox *et al.*, 2000; Dollard, 2002):

Content of work:

- Job design
- Workload/ Work-pace
- Work schedules
- Job control
- Environment and equipment.

Organisational and social context of work:

- Organisational culture and function
- Leadership style
- Supervision style
- Interpersonal relationships at work
- Role in organisation
- Career development
- Home / Work interface.

These factors have been further elaborated in various diagnostic tools and have become a basis for checklists in various OHS jurisdictions that have adopted risk management approaches to stress prevention, which will be the subject of further discussion in Chapter 5, dealing with regulatory frameworks.

While they are presented above as a list of neutral factors, it is the absence of their positive features or the presence of their negative aspects that has the potential to cause work stress. Thus in the work content category, the following are examples of specific organisational factors relating to work stress:

- work overload or under-load
- lack of sufficient job control
- lack of role clarity or conflicting roles.

Job intensification (or overload) and job insecurity have been singled out as specific factors identified as significant causes of work stress across industries and workplaces (Burchell *et al.*, 2002; McDonald & Upsdell, 1996). Similarly, organisational change in an employment context, where certainty and job security are no longer valid, have also been recognised as a significant area that needs to be

managed well to reduce its negative impacts (Baruch & Hind, 1999), change must be managed well.

Other studies focused on particular industrial groups, such as police, teachers or health practitioners, and identified specific causative work factors in their work settings. Some work factors specific to health and community services, for example, were identified as: emotional labour; a requirement to hide one's feelings; exposure to trauma; relocation; demands; lack of patients/peers/community understanding of work role; unrealistic client expectations; professional isolation due to institutional racism; traumatic work experience; and bullying and violence from clients (Blewett *et al.*, 2006). Aboriginal health workers had additional specific issues to deal with, including overwhelming community demands, and being continuously exposed to trauma from high levels of illness, loss and grief in their communities (Williams, 2003).

Work context factors that have been identified as either buffering workplaces against stress or causing negative wellbeing outcomes are work relationships, organisational culture and leadership styles. A particular emphasis has been placed more recently on workplace bullying which is at the extreme end of negative workplace relationships. Given the recent focus on this phenomenon in the workplace in relation to work stress or sometimes without any reference to it, it has become an independent factor, and will therefore be discussed in section 2.7.3 below.

The UK Health and Safety Executive has been systematically analysing work factors most closely relating to work stress. Its initial focus was on nine factors (Rick *et al.*, 2002):

1. Poorly designed/managed workload
2. Poorly designed/managed work scheduling
3. Poorly designed/managed work design
4. Poorly designed/managed physical environment
5. Lack of skill discretion
6. Lack of decision authority

7. Lack of appropriate proactive support
8. Lack of appropriate reactive support
9. Poorly designed/managed procedures for eliminating damaging conflict at individual/team level (bullying/harassment).

These factors more recently have been expressed in terms of positive management standards (Bond *et al.*, 2006; Cousins *et al.*, 2004):

- Demands include workload, work patterns and the work environment.
- Control – how much say a person has in the way they do their work.
- Support includes encouragement, sponsorship and resources provided by the organisation, line management and colleagues.
- Role – whether people understand their role within the organisation and whether the organisation ensures that they do not have conflicting roles.
- Change – how organisational change is managed and communicated in the organisation.
- Relationships – promoting positive working to avoid conflict and dealing with unacceptable behaviour.

2.7.3 Work stress mechanism classifications

Despite an increasingly well organised grouping of factors known to have causative relationships with work stress, government organisations responsible for gathering and reporting the statistics of workers' compensation claims stress have not followed the researchers' leads. An example from the Australian Safety and Compensation Council's Compendium of Workers' Compensation Statistics (ASCC, 2007: 72) provides the following list of mechanisms of mental stress claims:

- Work pressure – disorders arising from work responsibilities and workloads, workplace interpersonal conflicts and workplace performance or promotion issues.
- Harassment – work-related harassment and workplace bullying, sexual harassment or racial harassment, including repeated assault or threatened

assault and repeated verbal harassment, threats and abuse from a work colleague.

- Exposure to workplace or occupational violence – includes being the victim of single acts of assault or threatened assault by work colleagues; and assault, threatened assault, verbal threat or abuse by persons other than work colleagues.
- Exposure to traumatic event – disorders arising from exposure to a traumatic event such as the witnessing of a fatal and/or other accident.
- Other mental stress factors.

An additional sub-category was also added to the list of mental stress claims of ‘Suicide or attempted suicide’ which included ‘all suicides, regardless of the circumstances of death, and all attempted suicides’. This surprising addition seemed to indicate that the above list comprises outcomes rather than causes, despite it being referred as ‘mechanism sub-categories distinguished by the nature of the actions, exposures and events that might lead to disorders’.

Not surprisingly, since the category of Work Pressure is wide ranging including both work content (workloads) as well as work context (work conflicts), it has attracted the largest proportion of claims (41%), followed by harassment (22%), exposure to occupational violence (16%) and other mental stress factors (5%). This official classification of the causative factors of mental stress reveals the lack of rigour applied to the psychological realm of injury as opposed to the precision and detail of mechanisms of physical injury. As an illustration, in this classification used by the national OHS authority in Australia, there are only four distinct categories of mental stress causes and three of them include some aspect of relational conflict, verbal assault or bullying.

The European Agency for Safety and Health identified the top emerging areas of risk under the key theme of psychosocial work environment, which include:

1. new forms of employment contracts and job insecurity;
2. the ageing workforce;
3. work intensification (including lean production and outsourcing);

4. high emotional demands at work (exposure to violence and bullying); and
5. poor work–life balance.

The new forms of employment contracts and job insecurity encompassed the following risks:

- precarious contracts in the context of unstable labour market;
- increased workers' vulnerability in the context of globalisation;
- new forms of employment contracts; and
- feeling of job insecurity.

The identification process involved consultation with approximately 70 experts using a Delphi technique and prioritising risks they believed were increasing. The risks associated with the above five areas were the negative effects on employees' health and wellbeing, the quality of work, and the creativity and innovation needed by organisations in current markets. These experts have called for research to develop and test organisational interventions to improve the psychosocial work environment, and to investigate the role of psychosocial factors in the occurrence of errors and accidents, and in the reporting and aetiology of musculoskeletal disorders (EU-OSHA, 2007).

2.7.4 Work stress and bullying

Workplace bullying has been categorised as one of the many work environment factors causing work stress and this phenomenon has recently received a high public profile in terms of legislative action, organisational initiatives and community awareness. As a result, it has become, in some respects, the focus for all psychological injury prevention.

Bullying has also had a more precise definition which has been shared across health and safety jurisdictions in Australia. As an example, WorkCover authorities in NSW and Victoria have co-published Guidelines for preventing and managing bullying in the workplace in 2009, providing the following definition for bullying: 'repeated unreasonable behaviour directed towards a worker or group of workers that creates

a risk to health and safety' (WorkSafe Victoria and WorkCover NSW, 2009). It further explains that bullying can occur wherever people work together and under certain conditions, most people are capable of bullying. Types of behaviour that could be considered bullying, according to these guidelines include: verbal abuse, excluding or isolating employees, psychological harassment, intimidation, assigning meaningless tasks unrelated to the job, giving employees impossible assignments, deliberately changing work rosters to inconvenience employees, and deliberately withholding information that is vital to effective work performance.

The physical and psychological consequences of bullying are well documented and there are similarities between the consequences of other work stresses (Richards & Freeman, 2002; Woelfle & McCaffrey, 2007). These include: headaches, stress, irritability, anxiety, sleep disturbance, excessive worry, impaired social skills, depression, fatigue, loss of concentration, helplessness, psychosomatic complaints and post-traumatic stress disorder (Lewis & Orford, 2005). The victims of bullying are likely to have higher rates of absenteeism and to leave their place of employment (Johnson & Rae, 2009).

The prevalence of workplace bullying in the Victorian Public Service has been monitored reasonably consistently since 2004 through its climate survey. The results of this survey found that the overall percentage of respondents who have experienced bullying is 21% and the percentage reporting having witnessed bullying is 34%. Only 5% indicated they had experienced bullying and submitted a formal complaint. Despite this, around 80% believed that bullying is not tolerated in their organisation. This measure of experience of bullying is based on respondents' own perceptions and experiences. This trend has been consistent with very little change between 2004 and 2010, despite the survey sample changing each year in composition of organisations and respondents, with some changes to the question wording and improving the precision of its definition (State Services Authority, 2011).

Various legislative and OHS guidelines stipulate that bullying needs to be managed as a hazard in the workplace through a risk management process. In other words, it is singled out as a specific work stress factor and it is expected it will be treated in

the same way as any other work stress factor. Interestingly, however, it is explicitly mentioned in some of the OHS legislation, such as that in NSW, whereas other work stress factors are assumed. There are also a number of other guidelines and codes of practice relating to bullying, published by various government instrumentalities, which can be generalised into the overall management of psychological health issues in the workplace including work stress.

2.8 Work stress prevention approaches

The different models of work stress and particularly their orientation in individual or organisational terms, have led to corresponding approaches to its prevention or intervention. This section will summarise, from the recent research literature, key categories of work stress prevention, then focus on systemic approaches and finally describe a specific approach, referred to as the risk management approach. A more in-depth literature search and review of the effectiveness of such prevention programs will be presented in Chapter 4.

2.8.1 Categories of work stress prevention

From the earliest descriptions of prevention models (e.g. Newman & Beehr, 1979) they were categorised into organisational and individual models, based on the primary target of intervention. These categories have been also been classified as person-focused versus organisation-focused, for example by Semmer (2010). The organisational approaches to prevention involve some alterations to work processes or job design, whereas individual approaches are aimed at equipping individuals to adapt their response to a stressful environment and thus reduce the risk of developing work stress. Some of the organisational approaches may also target teams.

Another often quoted categorisation of stress interventions is based on the degree of prevention, that is, primary, secondary and tertiary (Giga *et al.*, 2003; Kendall *et al.*, 2000; Sutherland & Cooper, 2000). Primary prevention refers to those strategies that aim to prevent the occurrence of stress; secondary approaches refer to those that ameliorate the effects of stress; and tertiary interventions are reactive, aiming to

minimise the effects of stress once their experience has been noticed and reported. Traditionally there has been a much greater focus on and willingness to implement individual and secondary/tertiary level intervention programs by employers. There are far more evaluation studies and reports of these in the literature in contrast with organisational approaches. It is not known whether there are far fewer organisational level interventions or if they are less likely to be reported, studied and evaluated.

A combination of all of these approaches is usually referred to as systemic. Although research into the effectiveness of systemic approaches is limited, such interventions are associated with the greatest reductions of experienced stress. These approaches, their effectiveness and the different levels of prevention will be discussed more comprehensively in Chapter 4, as part of Study 1.

2.8.2 Systemic approaches

There have been calls in the literature for treating the issue of work stress in a more holistic, integrated or systemic manner, given its complexity and relatedness to individual factors, systemic aspects of organisation as well as wider societal systems. Levi (1990), for example, called for an ecological model based on the Person-Environment. Such a comprehensive occupational, environmental and health oriented program was proposed to have the following characteristics:

- a) systems oriented, addressing health-related interactions in the worker-workplace ecosystem;
- b) interdisciplinary, covering medical, physiological, emotional, cognitive, behavioural, social, and economic aspects of these interactions;
- c) problem-solving oriented and integrating complementary approaches;
- d) health oriented (not only disease oriented), trying to identify what constitutes and promotes health and counteracts ill health even in the presence of noxious exposures;
- e) intersectoral, evaluating health actions administered in other sectors (e.g. work, housing, nutrition, traffic, education);
- f) international, including multicentre collaborative projects carried out in different cultural and socio-political settings;

- g) participative, trying to involve not only occupational health professionals; and management, but the individual workers and their representatives as well (Levi, 1990: 1144).

More recently, researchers have defined a systems approach as one where there is integration between various levels of prevention (primary, secondary and tertiary) and the focus is on the organisational environment and systems (LaMontagne, *et al.*, 2006; LaMontagne & Keegal, 2012). There seems to be little recognition that a systems approach to such a complex problem of work needs to encompass broader societal elements including government, regulatory jurisdictions, unions and employer associations, in addition to organisational and individual elements. This thesis develops an argument for treating work stress in a broader context, based on a solid set of theoretical principles, similar to other complex and costly social issues that have had some success. For example, fatalities and injuries arising from motor vehicle accidents have been addressed through a multi-level systems approach.

2.8.3 Risk management approach

A taxonomy of organisational factors potentially causing harm (Cox, 1993) has led to a risk management approach to stress intervention. This approach has gained prominence as the framework adopted by many OHS legislations, regulations and guidelines attempting to prescribe approaches to prevent and manage stress. The risk management approach is well known within the OHS domain and it has been well accepted in the physical health and safety realm.

The risk management framework includes precisely defined concepts, processes and standards that have been documented through international standard setting bodies, such as Standards Australia, for example, AS/NZS ISO 31000:2009 risk management standard (Standards Australia, 2009). Key concepts of generic risk management include hazard identification, risk assessment and risk controls. Detailed processes are defined for identifying hazards that can potentially harm, assessing and evaluating risks and then treating those risks with planned interventions. The processes demand ongoing focus on communication and

consultation with all interested parties as well as reviewing and evaluating the effectiveness of those interventions.

The application of the risk management framework to work stress has produced a number of adaptations of these generic concepts and processes. They have also provided an opportunity to define work stress more precisely. Thus causes of work stress or work stressors have been redefined as psychosocial hazards. Exposure to such hazards is associated with a certain level of risk which has a potential to cause harm to psychological and physical health of employees, as shown in figure 2-2 below (Cox *et al.*, 2000). Controlling psychosocial risks is equivalent to managing and preventing work stress.

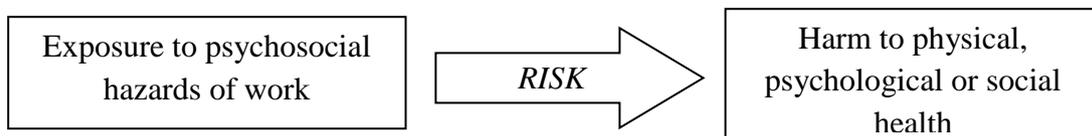


Figure 2-2 A simplified framework of psychosocial risk

Cox (1993) defined psychosocial hazards 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 and physical harm” (1993:31). There has been much development in the area of psychosocial risk management including comprehensive standards and frameworks (Cox & Griffiths, 1995; Mackay *et al.*, 2004, Leka *et al.*, 2011b). One example is the European framework for psychological risk management (PRIMA-EF), led by the Institute of the World Health Organisation (WHO) and involving a consortium of other European safety management institutions. This framework was constructed on the theoretical basis of the risk management process and including the elements of “logic, philosophy, strategy and procedures, areas and types of measurement”, Leka and Cox, 2010:153). At the same time, a “publicly available specification” (PAS1010:2011) was developed for the purposes of providing a definitive standard on managing psychosocial risks in the workplace by the British Standard Institution, an independent body responsible for developing standards for business in the U.K. (BSI, 2011).

The European Agency for Safety and Health analysed the drivers and barriers of psychosocial risk management as part of its regular European Survey of Enterprises on New and Emerging Risks (ESENER). While psychosocial risks are identified as one of the key priorities in health in health and safety and a number of actions have been taken to promote their management it was concluded that the translation of policy initiatives into practice has not had the expected results. The barriers that were identified include: lack of technical support, guidance, expertise and resources, sensitivity of the issue, and organisational culture (EU-OSHA, 2012).

The application of risk management principles to work stress prevention, terminology and processes is further discussed in more detail in the context of its application by the regulatory system in Chapter 6, as part of Study 3.

2.9 Organisational health theoretical frameworks

A related area of research is couched in terms of organisational health and wellbeing, as opposed to the absence of health, or its precursor, work stress. This section presents key concepts relevant to organisational health and safety climate.

2.9.1 Organisational health model

Another theoretical framework relevant to the management and prevention of work stress is that couched in organisational health terms. Hart and Cooper (2001) were concerned with the inadequacy of the stressors and strain approach to studying work stress and thus proposed the organisational health framework as an alternative theoretical perspective. The organisational health approach takes as its starting point a systematic focus of the dynamic interactions characterising the system of variables (e.g. multiple individual and organisational factors) relating people to their environments. The core elements of this framework include: individual characteristics interacting with organisational characteristics leading to staff wellbeing and subsequently to organisational performance.

According to the organisational health framework, it is important for researchers and practitioners to be concerned with the occupational wellbeing of employees and organisational performance (Cox, 1993). In other words, it is not sufficient to be

concerned with occupational wellbeing in and of itself, but instead, occupational wellbeing must be linked to outcomes that affect organisational performance.

The organisational health framework is a theory based approach defining interactions between key individual and organisational factors which determine employee wellbeing and organisational performance. The feature distinguishing this framework from other work stress frameworks is its focus on wellbeing rather than stress and strain. It includes the role of positive emotional experiences in the workplace and their role in people's wellbeing outcomes and provides a link between organisational elements such as leadership behaviour and work team climate and their impact on organisational performance. Cotton and Hart (2003) found that the organisational context factors, such as supportive leadership and work team culture, more strongly influence employee wellbeing outcomes than stress risk factors. They have also pointed out that work stress can be caused by the lack of positive experiences in the workplace or positive emotions rather than the presence of negative experiences.

Juxtaposing Cox's risk management model it then follows that exposure to psychosocial hazards can lead to lower employee wellbeing (morale, satisfaction and emotional distress) which in turn leads to employees' behaviours (e.g. withdrawal from work, submission of work compensation claims, discretionary performance and engagement) which directly impact on organisational performance (Comcare, 2005). A summary of this model is presented diagrammatically in figure 2-3 below. The consistency of findings across a range of settings has shown that the organisational health framework provides a robust evidence-based approach to the management of employee wellbeing and the prevention of occupational stress (Cotton & Hart, 2003). The recently developed framework for psychological risk management in Europe has also extended it to include the measurement of performance outcomes (EU-OSHA, 2012; Leka and Cox, 2010:153).

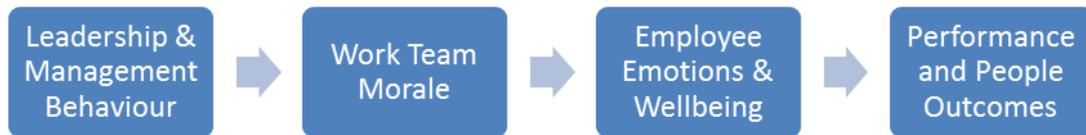


Figure 2-3 An organisational health model

(Adapted from Comcare, 2005)

2.9.2 Healthy conducive production model

The most widely accepted work stress framework of Demand-Control has given rise to a much broader framework of a healthy work design referred to as healthy conducive production (Karasek, 2004). This model responds to the growing recognition by the observers of organisational life that it has been driven primarily by rationalist and economic production imperatives with little consideration of its employees' psychosocial needs.

A proposed model of production and exchange is based on a new form of production output value referred to as conductive. This value is underpinned by greater control exerted in organisations by both workers and consumers. It activates their skills and capabilities empowering employees and transforming customers from passive recipients to active users. Its proposal has been prompted by the recognition that existing market oriented and social welfare policies do not take sufficient account of work organisations' psychosocial implications. An example is the level of work stress and resulting disability experienced by increasing proportions of workers.

The 'conductive production' phrase is defined as the process "involving networks of consumers and producers in skill-based production" (Karasek & Theorell, 1990). The model is called conducive because "the output is based on skills, which customers and producers induce in each other as they engage in these new processes of production and market exchange" (Karasek, 2004: 401).

The conducive production model of work organisation and production has a potential for preventing the difficult issues of work–life quality and work related psychosocial risks as well as its broader consequences of social deterioration. This model goes to the heart of the rationale behind work stress prevention and presents a coherent alternative to the current market drivers, which equally take into account the social and economic aspects of productivity.

2.9.3 Psychosocial safety climate

The dynamic Conducive Production Model (Dollard & Karasek, 2010; Karasek, 2004) was used to conceptualise what is arguably a psychological best practice to reduce the occupational stress problem.

This model, where production goals are equal to the goals of psychological health of workers, was used by other researchers to define work conditions that lead to achieving this state of balance of a healthy conducive production. This precursor to organisational elements, or ‘causes of the causes’ that give rise to such prevailing work conditions have been recently defined as the ‘psychosocial safety climate’ (Dollard & Bakker, 2010; Dollard & McTernan, 2011). The psychosocial safety climate of organisation is defined as policies, practices, and procedures for the protection of worker psychological health and safety. Its presence is associated with the environment that is free from psychological and social risk or harm. A low Psychological Safety Climate is considered the “pre-eminent psychosocial risk factor at work capable of causing psychological and social harm through its influence on other psychosocial risk factors” (Dollard & Bakker, 2010:580).

It encompasses four interrelated principles:

1. the level of senior management commitment and support for stress prevention;
2. the priority management gives to psychological health and safety v. productivity goals;
3. organisational communication upwards and downwards in relation to psychological health and safety; and

4. the extent of participation and involvement by managers and workers in relation to psychological health and safety (Dollard & McTernan, 2011: 290).

PSC is measured by aggregating perceptions of workers about these aspects to a unit or organisational level. There have been more recent studies of this construct in relation to work stress interventions.

2.9.4 Safety climate

Safety climate more generally refers to “employees’ perceptions of organisational safety policies, procedures, and practices” (Zohar, 2003). It has been demonstrated that safety climate plays a critical role in workplace safety and climates that are supportive of safety are associated with fewer occupational injuries than those that are not supportive of safety (Beus *et al.*, 2010).

Some researchers have conceptualised safety climate at two levels: individual (referred to as ‘psychological’) and organisational (Ostroff *et al.*, 2003). Psychological climate constitutes individuals’ perceptions about policies, procedures and practices while organisational climate is the collective of perceptions regarding the same. It is important to note that while the concepts of safety climate and psychosocial climate are related, the latter has specific regard to psychological safety, rather than general safety performance.

There are also interrelationships between safety climate and organisational elements which act as hazards to the psychological health of employees and thus impact on both mental and physical injuries. Törner (2011) postulated the following mechanisms promoting overall safety performance within organisations:

A leadership style promoting co-operation, inspiring, fostering group goals, as well as providing individualised support and empowering workers may intrinsically be expected to comprise rich and open communication and thus support the development of high-quality

interactions between managers and employees. Such interaction and communication may promote the development of mutual trust, and the development of a good workgroup climate. Trust, in turn, may further promote communication and interaction. Mutual trust, high-quality relations, and a strong group climate may promote workers' motivation and intentions to contribute to the organisational goals. Managers successful in demonstrating true and consistent priority of workers' safety may promote the development of workers' trust but also convince that safety is a prime organisational goal. This may promote workers' motivation to behave safely. Trustful relations characterized by empowerment and participation are then likely also to support the realization of safety intentions into safe behavior (2011: 1268)

The elements of a healthy organisation (e.g. supportive leadership style, mutual trust, open communication, high quality relations between management and workers) are interrelated prerequisites of a safe climate, and therefore appear to be overlapping concepts for psychological and physical safety. Psychosocial safety climate researchers appear to study these phenomena in isolation from safety or organizational climate. Greater integration of physical and mental safety science could thus provide an impetus for a parallel integration of policies, procedures and practices in organisations.

There are further parallels in intervention programs aimed at improving safety performance. While there is a preference amongst managers to focus on changing workers' behaviours, changing safety climate involves changing managers' behaviours. There is growing evidence to suggest that changing safety cultures result in improved safety performance rather than behavior based safety programs (Törner, 2008).

2.10 Organisational change and stress prevention

Work stress prevention programs can be conceived as change for both organisations and individuals. If any causes of stress are to be addressed by systemic organisational intervention, it will invariably require some change at least at one level of the organisation. It is therefore proposed to view stress prevention programs in the context of organisational change theory. This section briefly reviews literature relating to theoretical frameworks that have been adopted in this research.

2.10.1 Relationship between change and stress prevention

Organisational change research literature has provided a number of frameworks which have been evaluated for maximum effectiveness. Given the current competitive external environment, organisations must undergo constant change, to succeed and remain sustainable. Four types of change have been recognised by how each comes about: planned, emergent, contingency and choice (By, 2005). Planned interventions have been found to be most effective in terms of their impact on work settings and individual employee behaviour (Robertson *et al.*, 1993).

A number of overlapping models of introducing organisational change have been proposed in the literature (Kanter *et al.*, 1992; Kotter, 1996; Luecke, 2003). These models have been used as a basis for planned change and evaluating its effectiveness. As the need for change accelerates, it is argued that most organisations experience emergent change which cannot be properly planned. Some researchers have categorised change into three levels according to complexity, suggesting that level 1 change (where only parts of the system are altered or realigned) may not need planning; however, levels 2 and 3 (involving reorganisations of subsystems or entire systems) need guidance or planning to be successful (Kerber & Buono, 2005).

Fields (2007) proposed a further step to ensure organisational change is successful and to protect the interests of organisational stakeholders, to engage the boards and provide appropriate reporting at the Corporate Governance level. Fields pointed out that the implications of the current research is that boards that define and formalise

a distinct change process and that challenge managerial cognitive biases will achieve more favourable change results.

It has been recognised that it is often difficult to produce change resulting from stress prevention programs. Nytrö *et al.* (2000), for example, found that in order to facilitate the effective organisational change and stress prevention, the social and cognitive processes influencing the implementation of any intervention need to be taken into account and proposed that the following conditions are necessary:

- to create a social climate of learning from failure;
- to provide opportunities for multi-level participation and negotiation in the design of interventions;
- to be aware of tacit behaviours that possibly undermine the objectives of interventions; and
- to define roles and responsibilities before and during the intervention period (Nytrö *et al.*, 2000: 222).

2.10.2 Theory of Planned Behaviour

The Theory of Planned Behaviour (TPB) is a useful framework for analysing the process of attitude formation during organisational change. This model specifies the role of social influence variables in predicting intentions to engage in employees' specific behaviours. As this research particularly focuses on identifying the barriers to implementing systemic prevention programs, the TPB was selected as a helpful framework through which to analyse such barriers in terms of managers' intentions and behaviours in relation to introducing such interventions.

According to this theory, intention is the most immediate determinant of behaviour (Ajzen & Fishbein, 1980). Intentions in turn are proposed to be a function of three independent determinants:

- the person's attitude, conceptualised as the overall evaluation of performing the behaviour of interest;
- subjective norm, reflecting perceived social pressure to engage in the behaviour or not; and

- perceived behavioural control, which reflects the extent to which the behaviour is under volitional control.

The TPB has been used extensively in various research applications to successfully predict behaviour (e.g. Armitage & Conner, 2001). It is suggested that the same theory can be applied to the behaviour of managers in engaging in stress prevention. Whether any stress prevention behaviours are undertaken, the choice of the specific approaches can be predicted from the attitude to work stress and consequent social pressure applied from other managers, particularly at the higher organisational level.

In one of many examples of the application of this theory to health protective behaviour, Fishbein *et al.* (2003) demonstrated that attitudes, norms and self-efficacy influenced behaviour intentions; however, the relationship between intention and actual health behaviour was moderated by ability and environmental constraints. This is likely to be relevant to a situation where behaviour involves complex organisational constraints and variable skill levels in applying work stress prevention programs.

The usefulness of applying the TPB to organisational safety was recognised recently by Törner (2011), who argued that safety behaviour needs to take into account the complexity of organisations, and proposed a ‘social physiology’ approach, or in other words, treating complex interactions within organisations as one would in a living organism. In focusing on the mechanisms of influence on safety behaviours, elements of intention determinants, such as empowerment, autonomy and participation, were identified. These support the realisation of intentions to behave safely into actual behaviour.

Dholakia and Bagozzi (2002) found that certain characteristics of the process leading up to a personal decision to attain a certain goal contributed to the motivation to actually realise the goal. These important decision process characteristics were (a) the amount of effort that had been invested in the decision process, (b) the perceived importance of the decision process, and (c) confidence in the decision process. Thus, if managers realised their intention of preventing work

stress in teams and organisations led by them into actual behaviour, they would need to participate in the process, have confidence in its likely outcomes and sense the importance and value of such interventions.

2.10.3 Change Readiness

Readiness for change has been defined as “the extent to which employees hold positive views about the need for organizational change, as well as the extent to which employees believe that such changes are likely to have positive implications for themselves and the wider organisation” (Jimmieson *et al.*, 2004:C1).

To effectively plan and implement an organisational intervention, change recipients need to make sense of what they experience, and any conflicts between those who initiate change and change recipients must be resolved. In resolving such conflicts, the beliefs and cognitions of change initiators and change recipients must align. In other words, a state of readiness in the minds of the adopters needs to be generated (Holt *et al.*, 2007, Van de Ven & Poole, 1995).

The precursors to behavioural reactions can be conceptualised as beliefs which can lead to resistance for change recipients. Various measures of Change Readiness have been proposed, reflecting the following perspectives: change process, change content, change context and individual attributes. Armenakis *et al.* (2007) have analysed 41 publications in which authors identified one or more such beliefs. They proposed the following five components of Change Readiness as the most significant in determining the reactions to organisational change:

1. Discrepancy (belief that change is needed)
2. Appropriateness (belief that the change will match the need)
3. Efficacy (perceived capability to implement the change)
4. Principal support (support for change from opinion leaders)
5. Valence (belief that the change outcome is attractive) – categorised as extrinsic and intrinsic.

Armenakis *et al.* (2007) constructed and validated a scale to assess change recipients’ beliefs along these dimensions. Adapting this scale to managers who

play a significant role in stress intervention implementation can provide a useful test for these constructs and an assessment of the organisation's readiness to undertake such an organisational change.

Situated role theory stipulates that change can produce negative reactions in some recipients because they fear losing the comfort of known skills (e.g. Schabracq & Cooper, 1998). It can thus be argued that managers who are faced with the proposal of initiatives for reducing stress can respond with fear of inadequacy of changing their management style.

The conceptual framework for Change Readiness was described by Holt *et al.* (2007), and presented in figure 2-4 below.

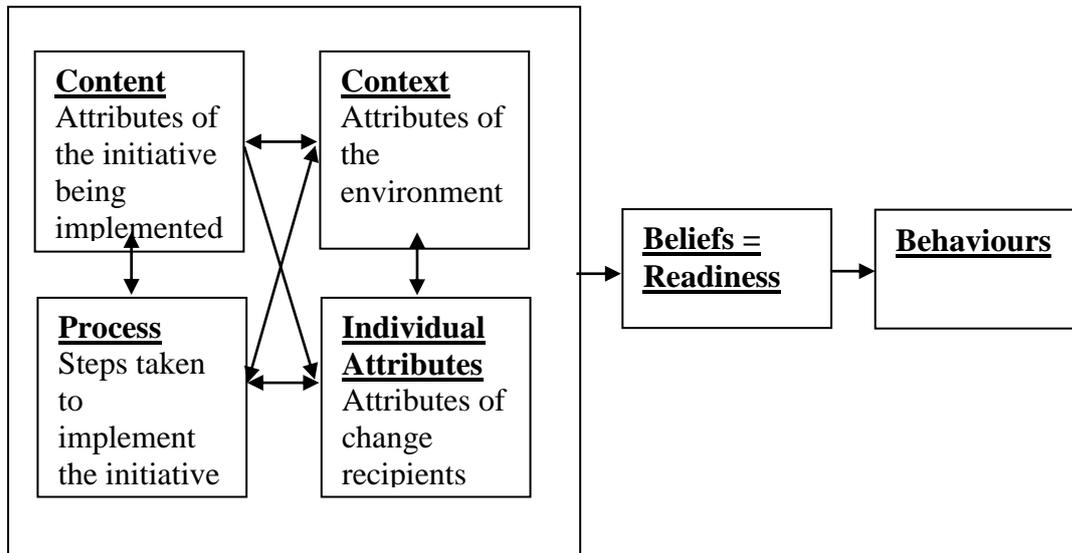


Figure 2-4 Relationship between content, process, context and individual attributes with change readiness (Holt *et al.*, 2007)

This framework comprises four factors: change content (i.e. what is being changed); change process (how the change is being implemented); change context (circumstances under which the change is occurring); and the individual (characteristics of the change recipients). In turn, readiness for change defined as a comprehensive attitude towards the change is being influenced simultaneously by these factors. The resultant beliefs about change reflect the extent to which individuals are cognitively and emotionally inclined to accept and embrace a particular change (Armenakis, *et al.*, 2007, Holt, *et al.*, 2007).

2.11 Prevention of stress or promotion of wellbeing

Discussions about work stress inevitably invoke concepts relating to negative individual outcomes, such as strain, distress, disease and injury, and organisational impacts such as withdrawal from work, absences, team dysfunction and workers' compensation costs. Thus the discourse of work stress is necessarily couched in terms of preventing or limiting these negative outcomes.

There has been a parallel research emphasis on positive constructs of job satisfaction, engagement and wellbeing (as discussed above, in Section 2.9 in the context of the organisational health frameworks). In the last decade or so, there has been a new and rapidly growing movement of 'positive psychology', which has brought with it, a specific emphasis on positive emotions, positive individual traits and positive institutions. As such, it has certain implications for work stress research, in that it deals with emotions within the organisational context, and concerns itself with promoting healthy institutions and positive psychological states and wellbeing.

The growing body of positive psychology research has brought with it recognition of the importance of positive and adaptive mental states (e.g. happiness and engagement) in promoting good physical health and psychological wellbeing (Seligman & Csikszentmihalyi, 2000). It was noted that there are surveillance systems of psychosocial risks in place in many countries in order to reduce the levels of work stress (a negative emotion) and while some of them measure job satisfaction (which is considered a cognitive construct), none of them measure positive states of engagement (Dollard *et al.*, 2007).

The concept of positive organisational behaviour has been defined as "the study and application of positively oriented human resource strengths and psychological capacities that can be measured, developed, and effectively managed for performance improvement" (Luthans, 2002: 59). To be included as part of positive organisational behaviour research, the following criteria must be met: (1) positive, strengths-based, and relatively unique to the field of organisational behaviour; (2)

theory and research-based with valid measures; and (3) state-like and open to development and performance management.

Another construct of positive psychological capacities associated with positive organisational behaviour includes: self-efficacy, optimism, hope and resilience. These capacities represent what has been termed 'psychological capital' (Luthans *et al.*, 2007). It has been defined as "an individual's positive psychological state of development" and is characterised by:

1. having confidence (self-efficacy) to take on and put in the necessary effort to succeed at challenging tasks;
2. making a positive attribution (optimism) about succeeding now and in the future;
3. persevering toward goals and, when necessary, redirecting paths to goals (hope) in order to succeed; and
4. when beset by problems and adversity, sustaining and bouncing back and even beyond (resilience) to attain success (2007:223).

Ironically, the discourse about psychological capital led some commentators to shift their focus to individual capacity for coping (Lazarus & Folkman, 1984) with stressful environments. Challenge stressors (e.g. high workload, time pressures, considerable responsibility) have been found to be positively related to job satisfaction and commitment, while hindrance stressors (e.g. organisational politics and role ambiguity) had a negative relationship with job satisfaction and were positively linked to turnover intentions (Podsakoff, LePine & LePine, 2007). Work stress has been associated with both negative and positive work outcomes, and individual differences are again being explored to discover how they influence the way people perceive and react to workplace stress.

While the focus on positive psychology of the workplace may lead to decreased work stress and increased organisational wellbeing, its effect on stress prevention has not been studied. Also, it cannot eliminate the employer's responsibility to reduce risks to employees' psychological health.

2.12 Summary

This chapter has reviewed the background literature on key concepts involved in work stress research. It commenced with definitional issues showing the difficulties with the clarity of language relating to this subject, which is related to the main focus of this research. A selection of seminal theories relating to work stress was then presented, concluding that the transactional models of stress are the most current and accepted theories dominating the field with implications for prevention.

Causes of work stress were then explored leading to a preliminary discussion of various approaches to its prevention and intervention in the workplace. The literature relating to this topic was revealed to be voluminous and complex, while at the same time providing little clarity and consistency to guide employers in this area. The concept of risk management as a dominant work stress prevention strategy was presented.

This chapter then reviewed the literature relevant to the core concept of this research, namely the conceptualisation of stress amongst lay people and managers. It then concluded with the discussion of other concepts and theoretical frameworks informing this research such as: organisational health, wellbeing, planned behaviour theory and organisational change as well as the new constructs borrowed from positive psychology research.

The next chapter describes the methodology utilised for this thesis. The chapter describes multi-method and multiparadigmatic approaches to the study. The use of adaptive theory is explained as the methodology used to analyse the qualitative studies. The details of the other quantitative sources of evidence obtained for this thesis are provided. The chapter also conveys the reasons behind the theoretical approach taken in this study and the range of other empirical sources obtained for this thesis.

3 Research Methods

3.1 Introduction

This chapter describes the methodological approach adopted in this research, commencing with a discussion of the overall research paradigms and their relevance to work stress and organisational theoretical foundations. The role of quantitative and qualitative research is discussed, as both are employed in this thesis. This discussion is followed by the rationale for selecting a multiparadigmatic perspective and the framework of Layder's (1998) adaptive theory is described in some detail.

The research questions are then restated and operationalised. The chapter provides a more specific outline of the study design and methodology, including data collection and analysis, as well as the use of background or 'orienting concepts'. It should be noted that the methods applied in each of the five studies are described in summary in this chapter, while more detailed methodologies applicable to each study have been included in each respective chapter (see Chapters 4–8). It was considered more practical to provide a detailed description of the specific methodology here to make it more immediately accessible to the reader. The final sections of the chapter cover the ethical considerations and justifications of the research methods used, and their validity and reliability.

3.2 Operationalising the research questions

The key research problem addressed by this thesis is to identify and explore the underlying barriers organisations face in adopting a systemic approach to stress prevention and integrating management of PsHS with existing OHS systems.

The aims of the study (see Chapter 1) focused on the following three research questions:

1. To what extent have Australian organisations have adopted systemic approaches to preventing workplace stress?

2. Where they are not adopted, what are the underlying reasons for their low uptake in terms of organisational systems and managers' belief systems?
3. What implications do these underlying factors have for underpinning theoretical assumptions, employers and regulators in the management of psychosocial health in the workplace?

The preliminary background factors that were addressed and tested prior to the study of organisational prevention approaches were:

- (a) Does the current research support the claim that systemic prevention approaches are effective?
- (b) What legislative and regulatory requirements exist for managing and/or preventing work stress?
- (c) How do the regulatory bodies manage compliance with their guidelines for work stress prevention within the OHS legislative frameworks?

A diagrammatic representation of the research design is shown in figure 3-1 below.

Following on from the background literature review (see Chapter 2), which led to the development of a comprehensive work stress ontology (see figure 2-1), the gaps in research were identified through a structured review of meta-analytic studies of the effectiveness of work stress prevention. This review covered a 30-year period of research between 1979 and 2009, commencing with in-depth analysis through to work stress intervention and prevention.

Each of the meta-analytic studies included in this investigation was analysed in terms of the effectiveness and types of prevention programs. The prevention programs were categorised into those involving individual or organisational level interventions. Conclusions were then drawn on the basis of reported evaluation measures as to whether those programs that are systemic in nature were found to be effective.

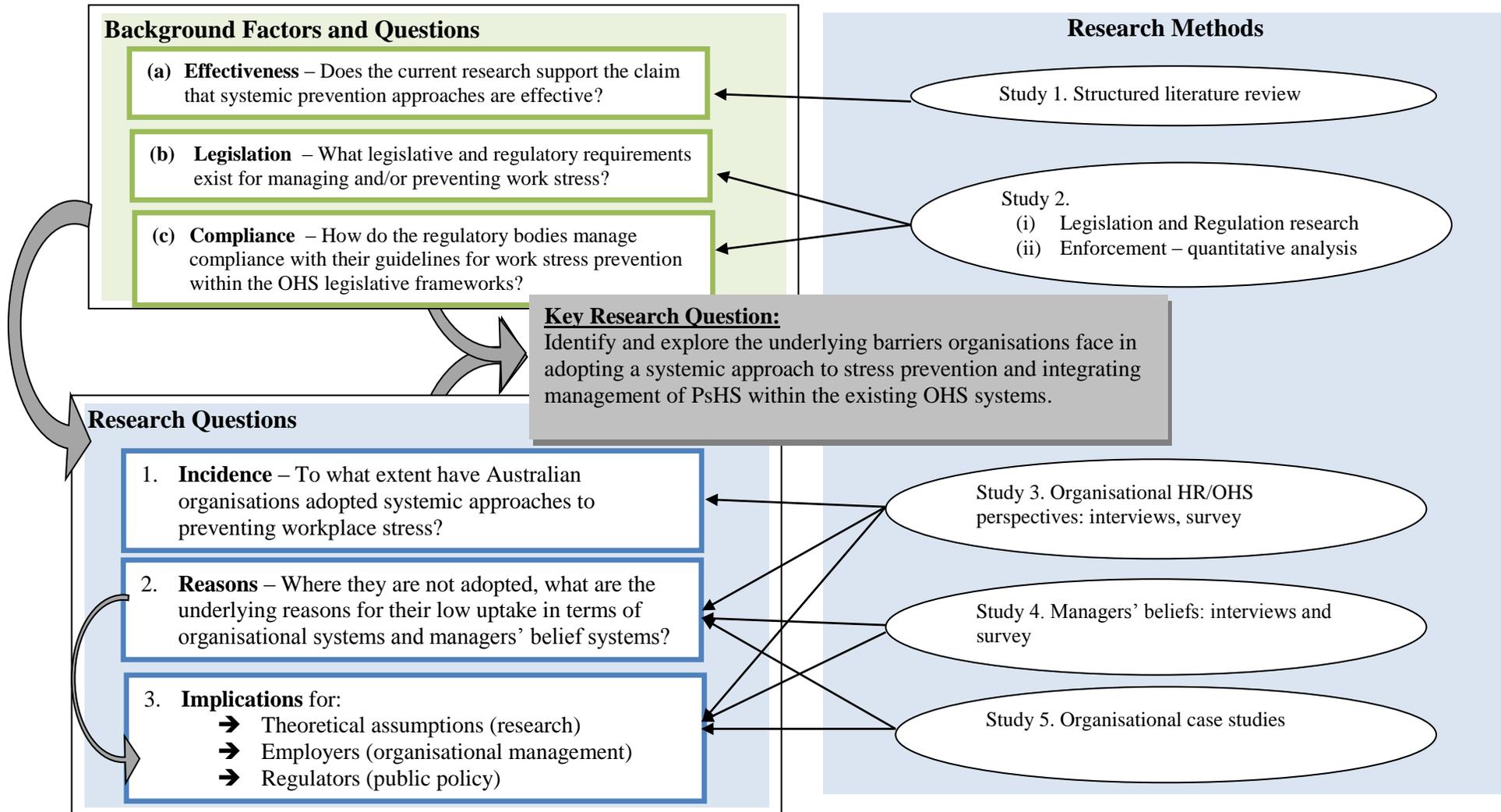


Figure 3-1 Research design model

The other background factors related to the legislative and regulatory treatment of work stress. To explore legislative and regulatory requirements for managing and/or preventing work stress, desktop research was undertaken of Australian and New Zealand legislative and regulatory frameworks relating to managing work stress or psychological health in the workplace. These included OHS, workplace health and wellbeing, mental health and bullying. All available documentation on the websites of state and Commonwealth entities responsible for this legislative area, such as WorkCover, SafeWork and Comcare, were identified and categorised.

To explore how the regulatory bodies manage compliance with their guidelines for work stress prevention within OHS legislative frameworks, further quantitative research was undertaken. The extent to which identified regulations were applied and compliance enforced was investigated in Victoria and South Australia. These states were selected due to the specificity of their respective OHS regulations in relation to psychological health and work stress. The level of compliance was operationalised in terms of the number of prosecutions involving psychological health, and the value of fines imposed on organisations found to be in breach of these regulations. The proportion of the value of penalties applied in the psychological health / work stress area compared with the physical OHS area were also calculated.

Having explored these three factors underpinning key research questions, namely the effectiveness of systemic prevention approaches in research, legislative approaches to work stress prevention and their enforcement, three subsequent studies were designed to answer: the extent to which the Australian organisations have adopted systemic approaches; and the underlying reasons for their low uptake, focusing on organisational systems and managers' belief systems.

These questions were operationalised in the following ways:

1. A set of factors that need to be met for a prevention approach to be considered systemic were derived from the literature review. These factors included:
 - commitment of the executive;

- documented policies;
- consultation with employees;
- risk assessments;
- participation of other relevant organisational units;
- evaluation and reviews; and
- integration with OHS systems.

A survey was developed as part of this research to test the degree to which stress prevention programs adopted by organisations are systemic. A scoring system was also developed to quantify this level of adoption. This survey was completed by HR or OHS managers who had the detailed knowledge of their organisation's activities in this area. The survey was also used as a structure for interviews with HR or OHS managers.

2. The underlying reasons for the low adoption of systemic programs, and in particular managers' beliefs were explored through the survey tool developed specifically for this research and incorporating the concepts from the TPB as well as other organisational systems and change concepts.

This survey was also used to elicit free text responses to questions relating to the conceptualisation of work stress. The survey tool was also used as a structure for interviews with managers.

3.3 Approaches to studying work stress

Work stress research has been of interest to a cross-section of disciplines, including psychologists, physiologists, sociologists and even economists involved in workers' compensation costs. While the psychology discipline has produced most of the research volume in this area, there have been calls for sociology researchers to recognise that stress related to psychological processes is embedded in complex social structures, particularly those pertaining to employing organisations (e.g. Pearlin, 1989).

As discussed in the previous chapter, studies of stress in the workplace have been predominantly focused on individual experiences, symptoms and reactions and have utilised a variety of measures such as self-reports, physiological measures and behavioural observations. Since the psychological and bio-medical research models have dominated this research field, it has been connected to a functionalist paradigm giving rise to the most prominent empirical theory generation and testing. This research attempts to span both functionalist and interpretivist paradigms to study how work stress is managed at the organisational level.

There are also few work stress research paradigms taking into account the complexities of organisational dynamics and systems. Most intervention research focuses on evaluating the effectiveness of programs in individual terms. This research attempts to take a more holistic view of work stress by studying it from the organisational system and through multiple perspectives.

3.4 Multiparadigmatic approach

Gioia and Pitre (1990) identified the need to span the gap between different research paradigms in the study of organisations, so that theory building and testing could be more fully representative of organisational phenomena. While the functionalist paradigm is acknowledged to be dominant, other more subjective paradigms also have a place in contributing to organisational theory and research. One such subjective paradigm in theory building is the interpretive approach, which is based on the principle that people “socially and symbolically construct and sustain their own organizational realities” (1990:588). The comparison between functionalist and interpretive paradigms is shown in table 3-1 below.

Table 3-1 Comparison of functionalist and interpretivist paradigms

	Functionalist paradigm	Interpretivist paradigm
Goals	To search for irregularities and test in order to predict and control	To describe and explain in order to diagnose and understand
Theoretical concerns	Relationships Causation Generalisation	Social construction of reality, reification process, interpretation
Data collection	Probing representative samples of subjects according to formulated hypotheses	Identifying specific cases Questioning informants
Analysis	Testing hypotheses: evaluate the significance of the data	Coding, formulating and evaluating conjectures, reviewing literature and formulating theory
Theory building approaches	Refinement through causal analysis; show how the theory is refined, supported or disconfirmed	Discovery through code analysis; show how it all fits together

Organisational science has been essentially based on the assumption that nature is objective and can be discovered impartially. Thus a deductive approach to theory building has been applied over the years. Gioia and Pitre (1990) however note that these assumptions become

problematic when subjective views of social and organizational phenomena are adopted or when there is a concern with transformational change. Suddenly, the existence of social ‘facts’ and the assumption of stability are called into doubt. The study of phenomena such as sense making, meaning construction, power, and conflict becomes very awkward to handle using any immutable objectivist framework (1990:587).

Having considered that the concept of work stress has been the subject of a large volume of research, predominantly from the perspective of a functionalist paradigm; for this study a multiparadigmatic and multi-method approach was selected to offer the possibility of “creating fresh insights because they start from different assumptions and, therefore, can tap different facets of organizational phenomena and can produce markedly different and uniquely informative theoretical views of events under study” (Gioia & Pitre, 1990:588).

This methodological approach has been selected as it has been considered most likely to deliver the answer to the key research question, of the factors inhibiting organisations from adopting systemic stress prevention programs, while enabling their theoretical exploration and generation of new constructs. It reflects the complexity of organisational function and change processes as well as the multi-faceted nature of the work stress phenomenon.

3.5 Qualitative and quantitative research

This study uses both qualitative (interviews and case studies) and quantitative methods (surveys and desktop research) to complement each other and provide a more complete picture of the organisational and individual managers' reality of dealing with work stress, which is considered to be a subjective phenomenon. This approach is based on Ritchie and Lewis (2003), who note that different social methods are suited to addressing different research questions, and methods must be chosen to 'fit' the research questions. Although interpretivist and functionalist paradigms are typically contrasted, in a multiparadigmatic approach both quantitative and qualitative methods are encouraged. A more general perspective on the role of qualitative research in studying subjective phenomena is provided by Miles and Huberman (1994: 10):

Qualitative data, with their emphasis on people's lived experience are fundamentally well suited for locating the meanings people place on the events, processes, and structures of their lives (...) and for connecting these meanings to the social world around them. Qualitative data are useful when one needs to supplement, validate, explain, illuminate, or reinterpret quantitative data gathered from the same setting (1994: 10).

The authors articulated some recurring features of qualitative research which they proposed is conducted through an intense and/or prolonged contact with a 'field' or life:

- The researcher's role is to gain a 'holistic' (systemic, encompassing, integrated) overview of the context under study: its logic, its arrangements, its explicit and implicit rules.
- The researcher attempts to capture data on the perceptions of local actors 'from the inside', through a process of deep attentiveness, of empathetic understanding, and of suspending or 'bracketing' preconceptions about the topics under discussion.
- Reading through these materials, the researcher may isolate certain themes and expressions that can be reviewed with informants, but that should be maintained in their original forms throughout the study.
- A main task is to explicate the ways people in particular settings come to understand, account for, take action, and otherwise manage their day-to-day situations.
- Many interpretations of this material are possible, but some are more compelling for theoretical reasons or on grounds of internal consistency.
- Relatively little standardised instrumentation is used at the outset. The researcher is essentially the main 'measurement device' in the study.
- Most analysis is done with words. The words can be assembled, subclustered, broken into semiotic segments. They can be organised to permit the researcher to contrast, compare, and analyse, and bestow patterns upon them.

Miles and Huberman (1994) also point to a number of strengths of the qualitative data including the focus on events in natural 'real-life' settings: they are locally grounded. The emphasis is on a bounded phenomenon embedded in its context, with the possibilities of understanding underlying issues that may not be otherwise noticed or obvious. Another feature of qualitative data is their richness, and ability to reveal complexity.

This study set out to analyse the deep-seated reasons behind decision makers, embedded within complex organisational systems, choosing certain actions in relation to work stress. At the same time, while they are acting or omitting to act in this area of their responsibility, they are being acted upon by the demands of the

same organisational systems within which they have a duty of care to provide the work environment that is risk free from psychological injuries.

Therefore, it is suggested that these 'lived experiences' of managers and others responsible for managing work stress within organisations are most appropriately studied using qualitative methods as they are well suited for locating the meanings people place on events, processes and structures in their lives: their "perceptions, assumptions, prejudgements, presuppositions" (Miles & Huberman, 1994:10). The managers' beliefs, thought processes and attitudes are studied qualitatively through interviews, free text responses in surveys as well as case studies.

At the same time some survey questions are categorised and Likert-scales are adopted to enable quantitative analyses to be used to augment free text responses. Additionally, quantitative analyses is applied in other studies within this research such as ascertaining the level to which regulatory compliance is applied by state jurisdictions and the extent of integration of physical and psychological policy frameworks within organisations.

3.6 Selection of adaptive theory

As the aim of this research is to identify and analyse the underlying barriers to organisations adopting systemic stress interventions, it is suggested that these will comprise the elements missing from the current theoretical frameworks. Through qualitative data analysis the contribution of this research is to adapt current theories to take into account some of the missing elements such as organisational contexts and managers' beliefs.

Thus the most appropriate framework selected for this purpose is adaptive theory, developed by Layder (1998), because of its capacity to identify emerging theoretical constructs which then inform or adapt existing theory. It draws on the strengths of both classical and contemporary social theory, and allows for flexibility rather than stating a fixed set of values and rules that must be applied to research.

The adaptive theory includes attention to theory which emerges in conjunction with specific research projects, as well as to theory which exists prior to specific research projects such as general theories, hypotheses in need of testing, or some other body of accredited assumptions and axioms about a particular face of social life or substantive area. (...) The 'adaptive' part of the term is meant to suggest that the theory both adapts to, or is shaped by, incoming evidence at the same time as the data themselves are filtered through (and adapted to) the extant theoretical materials that are relevant and at hand (Layder, 1998: 38).

Layder's (1998) adaptive theory is typically categorised as being between "theory-testing or hypothetico-deductive approaches on the one hand and grounded theory (or theory constructing) approaches on the other" (1998:134). This approach allows a balance between how prior theoretical models contribute to research and the generation of new theoretical concepts arising from the analysis of data. The term 'adaptive' is used because it implies that the theory adapts to and is shaped by newly received evidence at the same time as the data are filtered through and adapted to relevant and available theoretical 'materials' (Layder 1998).

Layder's adaptive theory, was derived from the grounded theory (Glaser & Strauss, 1967) and is based on the following principles (Layder 1998):

- The social world is ontologically plural, and operates from multiple ontological domains.
- Methodological pluralism is needed to understand both the systemic aspects of society, as well as the less structured everyday 'life worlds' of social agents.
- There are different types and levels of theorising, and they all have their own forms of validity.
- Social research is concerned both with a partly pre-constituted universe of objects as well as with aspects of social reality produced by the active 'doings' of subjects.

- Positivist approaches that advocate the idea of one universal, objective, timeless, truth that explain a particular phenomenon are simplistic, and do not achieve accurate representations of social reality.
- Social life has both subjective and objective parts to it, and by abandoning objectivity, one rejects the systemic aspects of society and social life.
- Postmodern and poststructuralist stances remove the role of theory in social analysis, and attempt to describe rather than explain social life. Abandoning previous forms of social theory does not enrich the research.
- There are different ways in which theories can be ‘grounded’ or legitimised in data.
- Adopting methodological pluralism, one must also be cognisant of the compatibility and validity of different forms of knowledge. Plurality should be an openness and willingness to engage in different forms, levels and types of theory and evidence whilst considering their epistemological assumptions.
- An adaptive theory approach advocates research that is as open and flexible, as possible as the purpose of the methodology is to remain open to novel theory generation. It encourages research that draws on a wide array of theoretical and empirical resources and methodological strategies and techniques whilst maintaining a systematic method.

Layder (1998) argues that theories should be regarded as interim products that are constantly revised in light of empirical evidence and theory. In this thesis, rather than adopting a grounded theory approach, a combination of theory testing and theory generating approaches were used. Layder’s (1998) adaptive theory was selected as a suitable methodological guide. Rather than applying it rigidly, its ideas and principles were adopted. In reference to the context of this research, this approach allowed for analysing connections between the managers’ experiences, beliefs and intentions, and the systemic components of their organisations and broader society represented through policy makers and regulators.

The fundamental element of the adaptive theory generation approach is the interaction between “extant or ‘prior’ theoretical materials and emergent data from ongoing research”. This dual approach allows for both extant concepts and theory

to influence the analysis of data from ongoing research while the “emergent data shapes and moulds the existing theoretical materials” (Layder 1998:166).

The extant theories which form the context to the research presented here are the transactional theories of work stress (Cox & Mackay, 1981) which gave rise to the PsHS models (Cox & Griffiths, 1995; Mackay *et al.*, 2004), and organisational health theories (Cotton & Hart, 2003) which are first discussed in Chapter 2 and in more detail in Chapter 4.

The second extant set of theories relate to organisational systems within which stress interventions occur and organisational change, which they necessarily involve (Armenakis & Bedeian, 1999). These are summarised in Chapter 2 and later considered in the adaptation of theoretical models in Chapter 9.

The third group of theories relate to behavioural change taking into account attitudes and beliefs as precursors to behaviour including the Theory of Planned Behaviour (Ajzen, 1991, 2001) and Change Readiness (Armenakis, Bernerth, Pitts, & Walker, 2007). In this research, managers are considered to be actors in the change process or change recipients rather than just change agents. The data collected from the interviews with managers and surveys will be interpreted in light of theoretical constructs provided by these theories, and they will be juxtaposed with the organisational health and organisational systems knowledge base to enable the adaptation of the PsHS model, more readily implementable by organisations, in Chapters 8 and 9.

3.7 Case study approach

Case studies are useful in providing a multidimensional picture of a situation (Remenyi *et al.*, 1998) – providing richness of detail that can be controlled through the careful placement of system boundaries and considerations of the wider system environment that is relevant to the phenomenon under study. Boundaries can be expanded to incorporate emerging patterns and perceptions.

Case studies can be utilised as a source of understanding which is tolerant of ambiguity, paradox and contradiction. They offer the potential for generating alternative explanations from different stakeholder perspectives – enabling the consideration of contradictions and misunderstandings. The data and the analysis of case studies are grounded in reality.

Some of the advantages of case studies (Whitman & Woszczyński, 2004) include:

- identification of and focus on issues;
- richness of detail;
- multiple perspectives;
- multiple explanations (no absolute truth);
- cross-disciplinary remit;
- recognition of inherent complexity and its minimisation;
- capacity to handle conflict, disparity and disagreement;
- ability to show interactions;
- ability to observe emerging patterns;
- real-life setting;
- original problem context;
- ability to deal with interpretations;
- can extend boundaries to include aspects of wider system environment; and
- can be accumulated to form an archive of cases.

On the other hand, there are also objections that need to be overcome:

- sometimes viewed as soft data;
- biases inherent in accepting views and perceptions;
- questions about generalizability of findings;
- negotiating access to settings;
- boundaries are difficult to define;
- mainly retrospective;
- sometimes viewed as likely to take too long;
- the observer effect;
- reliability of conclusions; and
- little control over events.

Case studies were included in this research to complement the quantitative survey data, other qualitative interview and survey data and to enable an in-depth detailed analysis of organisational applications of prevention programs. It was also envisaged that these would provide an opportunity for theoretical testing against emerging patterns.

3.8 Literature review of meta-analyses

Meta-analyses are popular research study methods used to synthesise findings across a number of studies. Glass, McGaw and Smith (1981) identified three characteristics of meta-analyses:

- They are quantitative, using numbers for organising valuable information.
- They do not tend to evaluate the quality of existing studies; however, it attempts to record various aspects of existing studies' research methodologies to identify the interrelationships of findings.
- They aim to compare existing studies and to seek general conclusions across studies.

A number of advantages of meta-analyses have been recognised. They allow researchers to combine numerical results from a number of studies, to explain inconsistencies of findings. They provide a cumulative view of specific research topic by analysing similarities and differences across many studies. The quantitative procedures of meta-analysis help address some of the challenges introduced by the existence of multiple answers to a given research question (Rosenthal & DiMatteo, 2001). It is also accepted that the literature review is a crucial step in the meta-analytic research process with the purpose of summarising and integrating previous research (Yang, 2009).

A structured literature review of meta-analytic studies was used in this research to synthesise a large volume of disparate findings relating to the effectiveness of work stress interventions.

3.9 Research design

The research was conducted in five empirical study sets. The design of each is described in summary in the five sections below. It needs to be noted that more detailed methodologies related to each study are presented in the respective chapters (Chapters 4–8) as this arrangement was considered to be more practical and accessible to the reader.

3.9.1 Study 1 – Structured literature review of intervention effectiveness

The available meta-analysis studies published during a period spanning 30 years of stress intervention effectiveness were analysed using a narrative approach to determine the level of adoption of systemic stress prevention approaches and their comparative effectiveness.

The following criteria were used to select the meta-analysis studies of stress prevention for analysis:

- published either in a peer-reviewed journal or commissioned by a government institution;
- selected and evaluated on the basis of their methodology rigour;
- international and Australian studies; and
- published during the period between 1979 and 2013.

The following databases were included in the EBSCO Host search engine: Business Source Complete, PsycARTICLES, PsycINFO, Medline and Blackwell Encyclopaedia of Management Library. The following group terms were composed for this search: ('Stress') and ('work' or 'occupational' or 'job') and ('Prevention' or 'Intervention') and ('Meta-Analysis', 'Analysis' or 'Evaluation'). Searches were limited to peer reviewed articles and to the specified period of publication. In addition, research review articles referenced in all of them were included. Other reviews were obtained through searching OHS related institutional Australian websites such as WorkSafe Victoria and Safe Work Australia.

The articles and their findings were analysed to identify the number of work stress interventions addressing organisational factors, individual factors and/or both. The effectiveness of intervention programs in each of these categories was compared. More detailed methodology and sources of literature are presented in Chapter 4 (see section 4.6.1).

3.9.2 Study 2 – Regulations and compliance framework

The second study comprised two parts: (i) a review of regulations, and (ii) an analysis of prosecutions. In the first phase of this study, documentation, including all OHS laws and relevant regulations and guidelines from each of the jurisdictions was scrutinised, and the following areas of comparison were made:

- Legislative instruments governing employers' obligations to provide safe work environment
- Employers' duty of care obligations
- Employers' risk management obligations
- Specific legal requirements of employers' responsibilities for employees' psychological health
- Regulations, guidelines or guidance notes relating to managing or preventing work stress.

Comparison and contrast between the various jurisdictional requirements and regulatory frameworks formed the first conclusions from this study.

The second phase of this study involved analysing the application of these legal requirements. The level of enforcement was analysed in Victoria and South Australia in the area of non-physical injuries in the 10-year period between 2001 and 2011 (Victoria: 2003–2010 and South Australia: 2001–2011). These two jurisdictions were selected because their legislative frameworks had the most explicit requirements for managing psychological health in the workplace.

The approach to compliance was analysed by comparing the number of prosecutions and penalties issued for physical versus non-physical injuries. This analysis revealed the differences in the management of physical OHS and PsHS injuries and some of

the belief systems within the regulatory bodies. More detailed methodology is presented in Chapter 5 (see section 5.2).

3.9.3 Study 3 – Incidence of systemic prevention

Organisations comprising the population for surveys and interviews were located in Victoria and they included all Government departments at Local and State levels. Commonwealth Government departments with head offices based in Victoria were also included and sourced from published directories. Marketing databases comprising human resource, OHS and line managers who attended various seminars relating to management of employees' health in the workplace from: non-for-profit human service organisations, private companies in health and human service industry sectors and other private organisations, formed the basis of the survey population. This database included 860 organisations was then randomly sampled to communicate the invitation to participate in the study.

Data relating to the types of systemic stress interventions in Australian organisations was collected via interviews and surveys of 34 Human Resources, OHS or Risk Managers representing organisations in government, private and human service sectors. The human services and government sectors were particularly of interest in this study due to the fact that the Victorian Government published guidelines for stress prevention in 2006-07, which related specifically to this industry.

A survey was developed based on research of what constituted systemic work stress prevention. A sample of the survey instrument is attached in Appendix C. More detailed methodology is presented in Chapter 6 (see section 6.3).

3.9.4 Study 4 – Managers' beliefs

A series of eight interviews and 48 surveys of senior line managers were conducted to determine their conceptualisation and beliefs of workplace stress, its causes and approaches to prevention. The data were interrogated to determine the role of managers' attitudes, beliefs and experiences and their relationship with the intended behaviour in relation to the adoption of systemic prevention. The interviews of line

managers were conducted from the same organisations as the HR/OHS managers in Study 3.

The sample used in this study matched that described above in the third study, that is, the sample included organisations within the three industry sectors. Entry into the organisations was gained through initial contact with the HR/ OHS manager, who invited managers to participate in semi-structured interviews. The data set was then supplemented with information gained through surveys of managers within organisations representing the same sample characteristics.

Surveys were delivered via a web-based SurveyMonkey tool. A sample survey used for this study is included in Appendix D. Interviews with managers were only tape recorded when permission was given by the participant. Initial experiences with tape recording of interviews were that interviewees seemed to be more self-conscious and not as spontaneous with their responses in comparison to non-recorded interviews. This was likely to be related to the uncertainty of the topic and pressure they might have felt that they should be expected to know the answers although, in reality, they were struggling to present consistent messages in relation to some of the concepts. All of the interview data were recorded manually by the interviewer and transcribed immediately following the interview. More detailed methodology is presented in Chapter 7 (see section 7.3).

3.9.5 Study 5 – Case studies

Case studies of work stress interventions were selected from the organisations included in the above sample and described in more detail to illustrate various identified barriers experienced by those organisations in adopting systemic interventions. Each case study was analysed, following the adaptive theory principles, in terms of the frameworks adopted by this research, and the theoretical implications were explored. Each case study took into account the previous theoretical analysis and built on the past findings.

The organisations included in case studies were identified through informal networks and contacts with workers' compensation agents at the point where each

was planning to implement a work stress prevention initiative, triggered by an identified need at the organisational level.

Case study analysis included:

- a. Analysis of the rationale for the program
- b. Commitment from the executive management
- c. Level of consultation with employees
- d. Involvement of a cross-section of the organisation
- e. Analysis of the approach
- f. Analysis of managers' beliefs and attitudes through in-depth interviews
- g. Evaluation of the program.

More detailed methodology is presented in Chapter 8 (see sections 8.2 and 8.3).

3.9.6 Sampling and statistical techniques

The organisations included in Studies 3 and 4 (see Chapters 6 and 7) represented government, private and, in particular, the Human Services sector. Both large and small organisations were planned to be represented. Human Services was chosen because of a specific legislative requirement for stress intervention programs applying to this sector in Victoria.

Organisations were: randomly sampled from both Victoria and New South Wales; government organisations from published directories; and the private sector from a marketing database of attendees at a nominated seminar (e.g. Safety in Action conference and/or the Australian Human Resource Institute seminar).

It was planned to survey up to 10 organisations from each of the organisation types, through either interviewing and/or surveying a total of 30 HR/OHS managers. Twenty managers from each type of organisation took part, totalling 60 managers who were planned to be interviewed or surveyed. The actual numbers were 34 surveyed HR/OHS practitioners and 48 managers, due to poor response rates. As the response rate was low, there were a number of follow-up phone calls made throughout the 2012–13 to encourage greater participation.

Interviews were held prior to designing the surveys, thus providing the basis for the development of the survey items as well as additional data. As both surveys (HR/OHS manager and line manager) in their draft formats were being used as a structure for the interviews, they were also used to pilot the survey instruments.

The sampling of organisations for inclusion in Study 3 was random, through invitations sent out to a few hundred organisational representatives (comprising HR, OHS or Risk managers). The sampling of managers partly included a snowballing technique, given that HR managers identified in the initial organisational study proposed and invited other managers to participate.

This sampling technique to recruit interview participants for managers' interviews was chosen partly because of its practical application for conducting research in organisations, as the initial entry was obtained through HR / OHS managers and they had access to contact details of other managers. It was impractical to invite all the managers hence some self-selection of participants needed to occur. This technique was also consistent with the adaptive theory so that "the sampling to become a flexible accompaniment to the unfolding character of the research" (Layder, 1998: 27).

This sampling method is consistent with a scenario where the purpose is not to estimate the statistical incidence of a wider population's characteristics, but rather to represent their most salient characteristics. This method is preferred to probability sampling, criterion based or purposive sampling. Thus statistical representation and scale were not key considerations in the sampling strategy. This aligns with most qualitative research sampling methods (Ritchie & Lewis, 2003).

Non-parametric statistical techniques were utilised to test the predictions and validate the application of the TPB to stress intervention type organisational changes, taking into account the complexity and multi-level factors within the organisational environment.

3.9.7 Organisational people outcomes

Data relating to organisational effectiveness in terms of people measures was also planned to be collected from the organisations involved in the interviews and surveys. The following organisational measures verified by an expert panel were to be included:

- unplanned absences;
- staff turnover;
- workers' compensation data and related costs;
- number of lost time injury incidents and related costs;
- equal opportunity related claims and costs (e.g. discrimination, harassment);
- financial performance (e.g. meeting budget targets); and
- organisational effectiveness performance (e.g. productivity and stakeholder satisfaction).

While some of these data were available and provided in case studies, it was impractical to obtain this data from each organisation represented in a survey or interview. Although they were invited to submit the above data, the experience proved that it was not readily available from HR systems.

3.10 Ethical considerations

This research was designed with reference to the Australian National Statement on Ethical Conduct in Research Involving Humans (NHMRC, 1999), and it was approved by the Victoria University Human Research Ethics Committee.

Each interviewee and focus group was asked for their permission to use the data for this research and was provided with the ethical statement. Each emailed survey also included the introduction from Victoria University and provided information required by the Ethical Research Committee. A copy of this introduction is presented in Appendix B.

3.11 Justifications for the methodology

This thesis fills the gaps in work stress intervention research and avoids the problems typically associated with this area of research, namely not accounting for: organisational system complexities, the dynamics involved in change and managers' conceptualisations of work stress. This research has tackled this complex issue from multiple perspectives utilising a number of research paradigms.

The combination of surveys and interviews of HR/OHS practitioners, as well as surveys and interviews with managers, a case study approach utilising adaptive theory, a structured literature review of meta-analytic studies and statistical studies of regulatory systems provided a unique perspective on the complex problem of work stress prevention. The utilisation of a variety of data collection techniques also ensured reliability and validity of the resulting data. Those issues now follow.

3.12 Validity and reliability

3.12.1 Construct validity

Construct validity is the most relevant type of validity for this study and it refers to the extent to which an operationalisation measures the concept it is supposed to measure (Cook & Campbell, 1979, quoted in Bagozzi *et al.*, 1991:421). It assesses how well the ideas or theories are translated into actual programs or measures. Such assessments provide the empirical and theoretical support for the interpretation of the construct.

One of the ways to improve the validity and quality of the data in this research was to ensure the survey questionnaires were piloted and fine-tuned, prior to its implementation. The survey tools were initially used in face-to-face interviews with both HR managers and senior managers. In addition, data was analysed from the pilot sample and subject matter experts reviewed the surveys. Their feedback on design, wording and sequence of questions was taken into account before they were employed in the actual data collection. Refining the questionnaires has contributed to higher construct validity of the current research.

Using multiple measures and multiple methods reduces the distorting influences of random error and method variance (Bagozzi *et al.*, 1991). Using multiple sources of evidence, particularly in data collection, reduced error and improved construct validity by encouraging convergent lines of enquiry. The capacity to check research findings against the views of decision makers and HR/OHS practitioners provided a check on the soundness of the research design. There was a systematic attempt in the thesis to correlate the empirical data (interviews and surveys), organisational-level research (case studies) with concepts (theories of PsHS) and empirical data (surveys and interviews), which arguably maximised the construct validity of the project.

3.12.2 Data triangulation

Triangulation is broadly defined as the combination of “methodologies in the study of the same phenomenon” (Denzin, 1978, quoted in Jick, 1979:602). Multiple and independent measures reaching the same conclusions provide a more certain description of a particular phenomenon, thus improving the validity of research. (Ghauri, Gronhaug & Kristianslund, 1995).

Data triangulation in organisational research is achieved when it is collected from a number of actors from different levels of management and the workforce at the same organisation. In this study, as described above, a variety of techniques were employed including a literature review, analysis of OHS legislation and its application in enforcement, interviews with and surveys of HR/OHS operatives as well as senior line managers and three case studies. The linking of local and structural data as a requirement of adaptive theory also allows for a constant comparison between data sources and levels, and enhances methodological triangulation (Layder, 1998).

The research design also has an exploratory and theory formulating focus, rather than hypothesis testing, in trying to establish the organisational inhibitors to adopting systemic prevention programs. At each level of inquiry in this research, there has been a level of data triangulation. For instance, semi-structured interviews

of senior managers were triangulated against HR/OHS managers. This was achieved by them being available for comment and subsequent feedback which confirmed that the interviews represented a true representation of work stress prevention in each organisation. Triangulation in research design has been suggested to improve the validity of research by collecting the same data in different ways or collecting different data on the same subject (Ghauri, Gronhaug & Kristianslund, 1995:93).

It also adopts multiple study methods: surveys, semi-structured interviews and case studies. Multiple perspectives adopted in different research methods are shown in table 3-2 below. The boxes with ticks represent the views that were represented in each aspect of the study, to ensure all of them were covered through at least one method of inquiry.

Table 3-2 Multiple perspectives adopted in the research design

Perspective	Managers	HR/ OHS Managers	Employers/ Organisations	Employees	Regulators
Research method					
Desktop research / Document review	✓		✓		✓
Interviews	✓	✓	✓		
Surveys	✓	✓	✓		
Case studies	✓	✓	✓	✓	

3.12.3 Reliability and maintenance of records

Reliability refers to the reproducibility of the research project by other researchers choosing to investigate the matter using the same procedures (Yin, 2009). This means that the procedure must be well documented and contain knowledge base case study information, methods and traceable evidence which links the conclusions to the findings.

The procedural reliability, described as the adoption and systematic application of a well thought out methodology (Flick, 1998) was achieved through the maintenance

of research records, including research responses, and the reflective process. Notes taken by the researcher, which draw together the literature with the empirical findings as well as the databases of questionnaire and interview responses, were retained.

To increase the reliability of the research data, a record of evidence linking the data reflections with the emerging theory was maintained in this thesis. The documentation demonstrates the derivation of any evidence from the initial research questions to conclusions of the study.

The written record of this thesis comprises the following documents:

- research journal dealing with the development of the study;
- pilot studies;
- dated theoretical memos recording the evolution of ideas;
- interview and focus group records;
- research papers and books contributing to the bibliography;
- handwritten notes from journals, articles and books;
- Excel spreadsheet of regulatory data of prosecutions;
- NVivo v.9 record of interview analyses; and
- SurveyMonkey online database of survey responses.

3.13 Summary

This chapter has outlined research methodology in more detail and provided the justification for selecting the methods for this research. It began with describing previous approaches to studying work stress and presenting a case for a multiparadigmatic approach to social research. Adaptive theory (Layder, 1998) was also chosen for the qualitative aspect of this research (interviews and case studies) because of its capacity to build and broaden theory.

Additionally, the five studies forming part of this research designed to address key questions and their underlying assumptions were discussed. These included: the structured literature review (Study 1); research into the legislative instruments

related to work stress prevention, and their enforcement by the regulators (Study 2); incidence of systemic prevention approaches in Australian organisations gained through interviews and surveys (Study 3); exploration of managers' beliefs and behaviours in relation to work stress, couched in terms of organisational systems, Change Readiness theories and planned behaviour theory (Study 4); followed by case study analysis of in-depth interventions (Study 5).

The following chapter presents the results of Study 1, demonstrating the effectiveness of systemic prevention programs through a structured literature review of meta-analytic studies. The chapter will commence with the more detailed review specifically related to this topic of work stress interventions. It presents types of interventions and what is known about their effectiveness in preventing work stress.

4 Study 1: Effectiveness of work stress interventions

4.1 Introduction

The second chapter provided a review of the background literature on work stress. It argued that definitional and research challenges resulted in the early confusion about what work stress is and how the data can be usefully applied in the workplace. There has been, however, a convergence of work stress research and the transactional model has been accepted as the most valid and relevant in the workplace.

While the understanding of work stress may be increasingly consistent amongst the researchers, and associated with a common experience of its negative and costly impact on the organisations' operations and its people, there are few agreements on how organisations can intervene or prevent it. This chapter presents the findings of Study 1 on the effectiveness of work stress interventions. It commences with a presentation of a more in-depth literature review relating to stress interventions. The classifications of stress intervention approaches are proposed, particularly focusing on the distinction between individual versus organisational interventions.

This discussion is followed by a review of the international research addressing the effectiveness of stress intervention approaches. Study 1 included reviewing the evidence of the effectiveness of interventions published during 35 years of research. It confirms there is more research being reported on individual interventions, and that effectiveness is enhanced when systemic (i.e. organisational and individual) approaches are implemented, (Kasperczyk, 2010).

4.2 Types of workplace stress interventions

A stress intervention program has been defined as “any activity or program initiated by an organisation that focuses on reducing the presence of work-related stressors or assisting individuals to minimise the negative outcomes of exposure to these stressors” (Ivancevich *et al.*, 1990:252). According to the framework developed by

Ivancevich *et al.* (1990) for the design, implementation, and evaluation of stress interventions, they can target three different points in the stress cycle including:

- (a) intensity of stressors in the workplace;
- (b) employee's appraisal of stressful situations; or
- (c) employee's ability to cope with the outcomes.

While this definition takes into account the preventive nature of interventions, in that it refers to stressors (or causative factors), it only goes as far as including the reduction of their presence rather than elimination. Stress 'intervention' is at times used interchangeably with 'prevention'. The latter implies, however, a more upstream activity designed to proactively manage potential stress situation rather than reacting to a situation that requires intervening. It was recognised early on that there are multiple dimensions of stress interventions, and particularly that both organisational and individual aspects need to be considered when planning such responses. Newman and Beehr (1979) proposed a three-dimensional model taking into account the primary target, nature of desired response and an adaptive response, as shown in figure 4-1 below. In what was reportedly one of the first research projects of its kind, Newman and Beehr outlined a number of intervention approaches; however, they cautioned there was little evaluation available at the time.

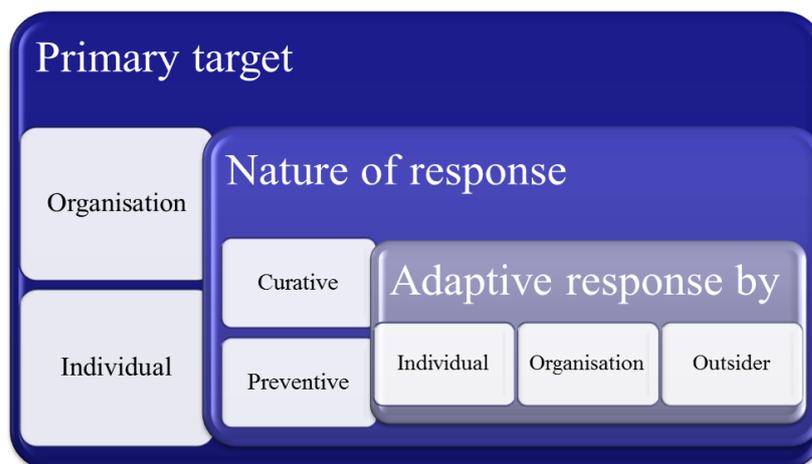


Figure 4-1 Early three-dimensional model of stress intervention
(adapted from Newman & Beehr, 1979)

The more recent and more comprehensive work stress intervention categorisation systems employ two broad dimensions: (1) the degree of prevention (i.e. primary,

secondary and tertiary), and (2) the level of organisational involvement (i.e. organisation-wide, team-based, individual) or a combination of these (Kendall *et al.*, 2000; Sutherland & Cooper, 2000).

Primary prevention refers to those strategies that aim to prevent the occurrence of stress; secondary approaches refer to those that ameliorate the effects of stress; and tertiary interventions are reactive, aiming to minimise the effects of stress once their experience has been noticed and reported. It is possible to classify an intervention program along these three dimensions, viewed as a matrix of nine categories as shown in table 4-1. This categorisation is useful although it has been recognised as problematic, as the boundaries between the categories may be blurred, and they may lack mutual exclusivity (Giga *et al.*, 2003).

Table 4-1 Stress prevention – intervention continuum
(adapted from Cooper *et al.* 2001).

Primary prevention	Secondary prevention	Tertiary intervention
Aims to address the sources of stress	Aims to modify an individual's response to stressors	Aims to reduce the effects of stress-related problems after they occurred
Proactive	Ameliorative	Reactive
Includes alterations to work environment, culture, job design, organisational change and clear policy framework	Includes stress management programs, critical incident debriefs, EAPs, health promotion and training in resilience	Includes return to work programs, early intervention stress case management and case management
Organisational approach	Individual approach	
Targeted approach	Ad hoc approach	
←-----Systemic approach -----→		

Examples of primary prevention at the organisational level are: job redesign, process re-engineering, leadership development programs and/or cultural change. Examples of secondary prevention at the individual level are: employee assistance programs, cognitive behavioural therapeutic or stress management training approaches. Examples of tertiary intervention programs are: rehabilitation

programs and case management, assisting those who have suffered psychological injury related to work stress to return to work.

Systemic approaches combine all levels of prevention programs through an integrated and comprehensive strategy. Each intervention level and approach is discussed in more detail in the following sections.

4.3 Individual level prevention

The most common approach observed in organisations is found in the individual category. These types of intervention programs are aimed at the individual, altering his or her perceptions of the work environment, and learning resilience and coping skills to reduce the negative impact of potential stressors (Richardson & Rothstein 2008). Interventions within the individual category include the following programs: relaxation training with and without biofeedback, meditation, cognitive-behavioural therapy, physical exercise, time management training, Employee Assistance Programs (EAPs) and other health promotional education (Giga *et al.*, 2003).

Some approaches include a combination of these programs; however, all of these are based on the assumption that altering the individual's perceptual, information processing, cognitive and behavioural responses are sufficient in order to reduce the probability of harmful stress effects. They also fundamentally ascribe the responsibility for managing stress to the individual.

There are compelling reasons for individual-directed interventions. Even prominent researchers advocating systemic approaches believe that addressing psychological styles or coping strategies should not be dismissed. Researchers advocate that some attention be directed to individual level interventions for a number of reasons:

Firstly, in situations where there are inherent job risks that cannot be eliminated, it makes sense that individual skill development, such as resilience and adaptive coping, be introduced as secondary risk prevention (Bond & Hayes, 2002). Secondly, individual efforts directed to reducing the underlying organisational causes of work stress may themselves be destabilised by poor individual coping

strategies (Bond, 2004). Thirdly, it is recognised that personality styles and personal stressors play a role in the reactions to work situations and may increase feeling stress at work. Finally, research has also shown that individual-directed stress management interventions are effective in improving mental health and job performance (Bond & Bunce, 2000; Murphy, 2003).

4.4 Organisational level prevention

Typically, organisational level prevention programs are proactive in nature and thus belong to the primary prevention category of stress intervention. There are numerous examples of organisational level prevention activities as they can include any program designed to develop and improve organisational health. All of these can have preventive effects on employees' health. For example, Giga, Cooper and Faragher (2003) identified the following programs reported in various studies as organisational stress intervention: selection and placement, training and development programs, improvements in physical environments, communication improvements, and job design/ restructure, and/or combinations of these.

Some of these organisational approaches listed above are immediately recognised as standard management programs adopted at various cycles of organisational life to effect change or improvement in performance. The extent to which these can be classified as stress intervention programs depends on the purpose for which they are enacted. The approaches combining individual and/or teams with an organisational strategy are referred to as multi-modal. Examples of such programs at both individual and organisational levels are the creation of peer support groups, improving worker participation, individually targeted education in coping and relaxation.

4.4.1 Systems approach to stress prevention

An organisational intervention that has become known as comprehensive or a systems approach is noted by a number of components including context-specific identification of those aspects of work that pose a risk to employees' psychological health. One formal approach to such an assessment is risk management

methodology which includes hazard identification, assessment of risk and planning (Cox & Griffiths, 1995) as a component of the organisation's Occupational Health and Safety system. This element is described in detail in section 4.4.3.

LaMontagne *et al.* (2006) in the VicHealth study classified stress intervention evaluation studies as having a 'high' systems approach if they were focused on: primary prevention directed at the organisation and environment; if they were integrated with either secondary and/or tertiary interventions; and if there was stakeholder participation in the conduct of needs or risk assessment. The following general hallmarks are typical of a stress intervention program that can be classified as being systemic (Jordan *et al.*, 2003):

- Risk assessment methodology
- Top management commitment
- A participative approach
- A formal stress prevention strategy
- Stress prevention activity.

Jordan *et al.* (2003) argue that the above five areas are essential to the development of a comprehensive stress prevention program and a culture that supports healthy workplace practices.

An important point of differentiation of a systemic approach is the emphasis of an accurate assessment of specific and context-specific risks. By focusing on the work aspects to which employees are exposed and which they report are most associated with negative effects, the prevention programs can be intelligently designed and evaluated (Biron *et al.*, 2006). A prevention program that adopts international risk management standards has built-in components of a systems approach.

A systemic approach to managing stress and overall employee health and wellbeing requires a comprehensive policy framework that comprises "plans to prevent and manage stress, support individual and organizational needs, and be continually evaluated and reviewed" (Giga *et al.*, 2003).

As stress prevention is to be appropriately managed within the OHS system, it is helpful to consider the elements that make up such a system (Bluff, 2003):

- integration into the organisation's other management systems;
- management commitment;
- planning and resourcing of OHS management;
- designation of responsibility and mechanisms of accountability;
- policy, procedures and documentation;
- risk management;
- worker participation;
- development of OHS competency;
- reporting, investigating and correcting deficiencies; and
- monitoring, auditing and reviewing OHS performance.

If a stress prevention program is to be truly considered systemic, it follows that some of the above elements of an OHS system should also be present. Studies 3 and 4 (conducted as part of this research and reported in Chapters 6 and 7), focus on the incidence of the adoption of systemic interventions in Australian organisations. These studies included the investigation of OHS systems and the extent to which they have integrated work stress prevention elements.

Israel *et al.* (1996) proposed an early systemic stress intervention model which identified the principles for the practice, implementation and evaluation of interventions summarised by the following elements:

- context specific interventions;
- comprehensive approach;
- primary, secondary and tertiary levels of prevention;
- different types of stressors;
- objective conditions;
- multiple outcomes;
- collective actions and broad scale change;
- participants' involvement and control; and
- multidisciplinary teams.

While the application of systems approaches to stress intervention is relatively new, it has great potential to address some of the weaknesses of popular individual-level interventions. Cotton and Hart (2003) identified two major weaknesses of such interventions: (1) they tend to ignore the complexity of organisation, their external contexts and internal interactions, and (2) lack of evaluation criteria relevant to the organisational level such as absenteeism, employee turnover, job satisfaction, productivity, quality of outputs or customer satisfaction.

4.4.2 Risk Management – an element of a systemic approach

Most systemic approaches are couched in terms of risk management to various degrees. This approach was derived from the transactional model of stress, based on a fundamental intrinsic assumption that managing stress in the workplace can be approached in a similar way to managing physical risks. This section introduces the risk management approach as one of the important organisational intervention strategies.

The risk management approach has been proposed initially by Cox (1993) and applied in practical settings in the UK through the Health and Safety Executive (HSE). On the basis of this framework, management standards have been suggested for reducing stress levels in organisations (Cousins *et al.*, 2004; Mackay *et al.*, 2004). Couching stress in risk management terms provides a basis for a systematic way of dealing with its prevention. If it is agreed that stress is a negative and harmful response, what previously might have been referred to as stressors or stress factors can be described as hazards within this framework.

A hazard is defined as an event, a situation or an aspect of work which has the potential to cause harm (HSE 2000). The concept of risk provides an estimate of such potential when the frequency of exposure to the hazard plus the probability and severity of its negative consequences are considered. Psychological injury or harm becomes far more precise than ‘stress’, which continually implies a negative response within an individual, or a precursor to potential harm.

Within this methodology, risk is defined as “a combination of the probability, or frequency, of occurrence of a defined hazard and the magnitude of the consequences of the occurrence” (Biron *et al.*, 2006). The risk management approach to understanding and preventing stress has gained increasing acceptance in the UK, Europe, New Zealand and some Australian Health and Safety jurisdictions. In this paradigm, the mechanism of injury is treated in the same way as in physical injuries, recognising that the injury occurs from interaction between the individual and the environment. For example, the worker’s exposure to a slippery floor hazard may lead to their injury, only if they interact with it by slipping. Increased exposure to a physical hazard and certain personal characteristics (such as poor sensory-motor coordination) will cause increased risk in the same way that some individuals will be at greater risk of psychological harm, due to their transactions with those aspects of work known to act as psychosocial hazards.

As various government health and safety jurisdictions adopted this approach, work stress has become a risk-assessable disease. As such it has been subject to increasing litigation, as risk in the employers’ domain is something that can be estimated and controlled. If employers were to adopt such an approach to managing risk with the rigour usually applied to other corporate risks, such as those of financial or reputational nature, and if implemented controls were effective, it follows that some stress would be prevented.

Researchers argue that risk management methodology is effective, informative and cost-effective, as stress related risks can be prioritised and high risks can be controlled through more expensive organisational development solutions, while low risks may be effectively controlled through individual approaches (Clarke & Cooper, 2000). Clarke and Cooper (2000, 2004) proposed a formula for estimating the level of stress risk based on a standard risk management methodology, calculating the product of exposure level of a hazard and the level of negative consequences associated with this exposure. They reported that this methodology has proven to be useful to prioritise and target specific organisational factors and plan organisational interventions.

Biron *et al.* (2006) expanded this formula for estimating risk by incorporating a coping dimension in order to better reflect the transactional theory stress model. They reported that the introduction of coping strategies in the computation of risk level increases the strength of the relationship between risk exposure and outcomes, illustrating that the improved formula constitutes a more precise method to assess risk.

4.4.3 Evaluation of prevention programs

Different approaches to stress intervention have also led to varying approaches to studying their effectiveness. Some studies use pre- and post-intervention individual measures of stress responses, using either physiological, psychometric tests or qualitative self-reports. Others utilise organisational measures, typically involving perceptions of the participants and rarely quantitative organisational outcomes.

Until the early 2000s, partly due to such a variety of methodologies and theoretical frameworks, little evidence of any significant value of stress interventions was available. In fact, many researchers agreed interventions have not been effective and acknowledged the failure of many stress interventions to reduce poor health outcomes and increase organisational outcomes such as productivity and higher, overall morale (Cooper, 1998).

More recently, a number of meta-studies have emerged providing a comprehensive analysis of the known effectiveness of stress interventions, both internationally (Giga *et al.*, 2003; Jordan *et al.*, 2003; Kompier *et al.*, 2000; Richardson and Rothstein, 2008; van der Klink *et al.*, 2001) and locally in Australia (Blewett *et al.*, 2006, Caulfield *et al.*, 2004; LaMontagne, *et al.*, 2006, LaMontagne, *et al.*, 2007). Their findings also indicate a plethora of different approaches to intervention including: different frameworks and measures; few evaluations are of robust research quality; and few organisational interventions are being reported or evaluated.

Caulfield *et al.* (2004) investigated empirical research into the quality of work stress interventions conducted in Australia during the 10-year period (1993–2003). Their

findings uncovered only six studies and all of them were conducted in the public sector. Only one study reached ‘the gold standard in evidence-based research’ as defined by these scholars. They concluded there was very little knowledge available on the effectiveness of occupational stress interventions in Australia and an urgent need exists for further research in the area, particularly focusing on the private sector, rural workers and scientific evaluation.

The authors hypothesised that the lack of published evaluation studies may be due to the sensitivity of issues surrounding organisational research, that sharing information could be seen to give advantage to competitors through better stress recognition and reduction of compensation (Caulfield *et al.*, 2004). This is considered unlikely as responsible organisations of the kind that would promote this sort of research are known not to compete on health and safety issues and especially mental health as it is arguably, considered unethical. They tend to share information that can potentially reduce negative health outcomes through benchmarking forums and industry conferences. Thus the conclusions that few studies evaluate stress prevention, or there are few stress prevention programs to evaluate are more likely.

According to these authors, future work in this area should focus on uncovering Australian intervention studies or programs that have not been published and delving into the grey area of work stress interventions to find out what industry is actually doing to tackle the stress situation. This research is partly an attempt to fill this knowledge gap.

A major difficulty arising in empirical studies is the lack of consistency of measures used to evaluate outcomes of stress intervention programs. Another issue seems to be a lack of inclusion of organisational measure, instead relying on self-report measures to stress experienced by participants. Most evaluations of stress prevention programs encountered difficulties with the complexity of measuring organisational change (Nytrö *et al.*, 2000), and thus opting for simpler uni-dimensional studies with a small range of variables. Semmer (2006) pointed out that few evaluation studies focus on economic arguments of introducing change, process aspects of the research design or skills of the change agents.

Van der Klink *et al.* (2001) used meta-analysis on 48 studies published between 1977 and 1996 and found favourable outcomes from stress intervention programs. A small but significant effect was reported from cognitive-behavioural interventions, followed by multi-modal, then relaxation and finally organisational programs. However, it needs to be noted that only five of these studies used organisational interventions and, most importantly, this study included studies of different methodological designs and quality without taking these differences into account. Giga *et al.* (2003) concluded from their meta-analysis there are a variety of programs adopted by organisations to prevent and manage stress at various levels of the organisation. “Programs vary widely in their objectives, structure, and target groups, and there is some scepticism regarding the practicality of using off-the-peg programs that have been developed without considering specific organizational requirements” (2003:280).

The difficulties facing researchers evaluating stress were documented in detail by Richardson and Rothstein (2008), who meta-analysed 36 studies representing 55 interventions spanning 1983 to 2004. They identified 60 different outcome variables being used with the most common (in 35 out of 36 studies) being psychological measures including stress, anxiety, general mental health and job satisfaction. They also found there was no uniform scale used for any construct. Stress was measured via 11 different scales including:

- Job Stress Index
- Occupational Stress Inventory
- Perceived Stress Scale
- Personal and Organisational Quality Assessment
- Teacher Stress Measure.

Fewer studies (25%) also used physiological measures such as blood pressure, epinephrine and norepinephrine levels, galvanic skin response and cholesterol. Even fewer studies assessed organisational specific measures such as absenteeism (4 out of 36) and productivity (2 out of 36). Richardson and Rothstein’s (2008) findings pointed to the cognitive-behavioural interventions being the most effective, agreeing with van der Klink *et al.*’s (2001) results, followed by multi-modal interventions. A

number of other studies examining the evaluations of stress interventions published over the last decade have been sponsored by government institutions such as: Health Safety Executive (HSE) in UK, and VicHealth and WorkCover authorities in Australia. These programs have been increasingly focusing on the effectiveness of systemic interventions (see section 4.6).

New models and approaches to evaluating organisational interventions have been proposed more recently as a response to inconclusive evidence of their effectiveness and the multiplicity of different approaches to measuring effectiveness. It has been recognised that the complexity of organisational systems within which interventions are being introduced means that that it is difficult to determine: “(1) what exactly the intervention entailed; (2) whether the intervention was implemented fully or adhered to good practice guidelines; and (3) whether there were confounding factors in the wider social context that would affect the outcome of the intervention” (Egan, *et al.*, 2009: 4). Organisational work stress interventions are analogous to organisational change and as such new models and theoretical frameworks have been proposed for evaluation processes (Martins, 2011). Such frameworks have identified the need for including qualitative dimensions in the evaluation, namely process, context, reporting as well as outcomes and targets (Biron *et al.*, 2012). New theoretical frameworks based on change mechanisms have emerged, based on the mechanisms of change which may impact on the effectiveness of works stress intervention: emotional contagion, shared meaning and social identity (Biron & Karanika-Murray, 2014).

Randall, Nielse and Tvedt (2009) developed an intervention process measure to add value to the evaluations from the process perspective. The dimension of this measure included line manager attitudes and actions throughout the intervention, exposure to intended intervention, employee involvement, employee readiness for change and intervention history. They showed that both qualitative and quantitative process evaluation data should be combined to support outcome evaluation. Their research also indicated the need for the inclusion of employees’ appraisals of interventions and their processes for effective evaluations.

4.5 Paucity of systemic prevention programs

If anything can be unequivocally concluded from a series of articles analysing the evaluation of stress intervention, it is the following:

- a) the low number of reported primary prevention, systemic and organisational approaches to workplace stress interventions;
- b) methodological limitations of many evaluations of such approaches, lacking particularly in longitudinal research and controls; and
- c) personal outcomes, most often measured as self-reported perceptions of stress or wellbeing, being predominantly used by researchers in preference to organisational measures.

The conclusions of Griffiths, Cox and Barlow (1996) that "the lack of organisation-based intervention studies is a real barrier to progress in reducing work related stress" have been echoed by a number of subsequent researchers. Despite the research into the risk of organisational factors being linked to stress, intervention strategies currently used by employers are predominantly focused on the individual (Biron *et al.*, 2006; Giga *et al.*, 2003; Kompier & Cooper, 1999; Murphy & Sauter, 2003).

There are few comprehensive evaluations of these approaches conducted with high quality experimental designs. There is also a variety of measures of stress resulting in comparisons being difficult and adding to a confusing picture for practitioners. The results of European studies also do not seem to fare much better in terms of reporting organisational and systemic prevention programs (Kompier *et al.*, 2000), although more recently, there has been an increasing trend to focus on organisation-based interventions in the UK (Giga *et al.*, 2003). Richardson and Rothstein (2008) found that out of 55 studies analysed, only 8 were primary interventions. They concluded that organisational interventions continued to be scarce. Similar proportions of primary interventions have been reported in many other studies (van der Klink *et al.*, 2001). One of the most comprehensive systemic reviews of 90 job stress evaluation studies between 1990 and 2005 also found a "hopeful" increase in the number of studies with better evaluation methodologies and reporting more organisation approaches (LaMontagne, *et al.*, 2007).

4.6 Effectiveness of systemic programs (Study 1)

Subject to the limitations of both quantity and quality of studies evaluating stress prevention, there are indications that some stress intervention programs are effective in producing positive outcomes for individuals and even greater benefits at the organisational level. In order to answer the question of how effective organisational and individual interventions are in terms of preventing or reducing negative people outcomes, a structured literature review was conducted, to gather the most comprehensive picture of what is currently known. The meta-analytic studies are of special interest as they have limited their selection of source studies on the basis of rigorous evaluation methodology.

4.6.1 Methodology for this Study

The detailed methodology was reported in Chapter 3 (see section 3.9.1). In summary, the meta-studies addressing the effectiveness of stress interventions were identified through utilising the EBSCO host search engine. The terms used for this search were: ‘Stress’ and ‘work/ job/ occupational’ and ‘Prevention/ Intervention’ and ‘Meta-Analysis/ Analysis/ Evaluation’. The search was limited to peer-reviewed articles or those commissioned by a government institution and published between 1979 and 2013. It included both international and Australian sources.

In addition, research review articles were included. Other reviews were obtained through searching OHS related institutional Australian websites such as state government departments responsible for regulating OHS (e.g. WorkSafe and Safe Work Australia).

4.6.2 Findings from the review

The search yielded 16 research reports or peer reviewed articles, providing summaries of 678 separate intervention studies. As some of them repeated other studies or had overlaps between them, at least 436 were found to be unique. Each of the studies was analysed in detail with respect to the extent to which

organisational, as opposed to individual prevention/ intervention programs, were implemented and evaluated. The results of this review are shown in table 4-2 below.

As summarised in the table on the following pages, organisational level interventions have been reported far less frequently than individual interventions. At most, the organisational approaches represent about 27% of evaluation studies. This finding confirms: there is a paucity of organisational level interventions carried out or that they are not being reported; outcomes measured by the studies were rarely expressed in organisational terms; and the vast majority of intervention evaluations were expressed in individual measures.

Table 4-2 Analysis of systematic reviews of stress interventions in the workplace

Authors	No of reviewed articles	Geog. area limit	Period	Criteria for selection of articles	Industries	Approach	Research quality evaluated and rated	Classification framework for individual vs org programs	No and % of reviewed articles – organisational intervention	Conclusions about effectiveness and org. vs individual interventions
Newman and Beehr (1979) (referred to as the first study of its kind)	46	Intl	1967–78	General literature review of personal and organisational strategies for handling stress	Wide range	Narrative	Opinions and evaluation studies included; no attempt to exclude or rate studies other than to note its evaluation methodologies; only one study with controls	12 categories based on different adaptive responses or participants (person, organisation, outsider); the primary target (person, org) and nature of response (preventive, curative)	23 out of 46 articles addressing organisational strategies	No conclusions about effectiveness can be drawn.
Murphy 1984 (critiqued by DeFrank & Cooper, 1987)	13	Intl	1977–84	Focus on individual interventions	'White collar' workers	Narrative	Great variation in research quality but no attempt to exclude studies with poor methods; lack of evaluative studies noted	Three categories of intervention: primary, secondary and tertiary	None	Generally acceptable positive effects but difficulty assessing the quality of gains
Van der Hek and Plomp 1997 (update of DeFrank & Cooper, 1987)	37	Intl	1987–94	Any stress intervention with some evaluation	Wide range	Narrative	Some kind of evaluation	Three categories based on level of intervention: I, O and I/O interface	5 out of 37 (13.5%) identified as O-level intervention; only 2 of them used org measures	Some effect noted in interventions but no consistent picture
Kompier <i>et al.</i> , 2000	9	Europe	Prior to 2000	Specific intervention – implemented and evaluated; unpublished case studies	Range	Case study step-by-step approach	1 to 5-star evaluation quality; minimum 3- star standard required for selection; only one obtained a 5-star rating.	Classified into work-directed, person-directed and other interventions/ measures	8 out of 9 reported work-directed measures. Majority (7 out of 9) reported both work and person-directed measures.	In 3 out of 4 studies using sick leave as an outcome measure showed significant reduction. Seven studies using self-report measures in general had positive outcomes. Four reported economic cost benefits.

Authors	No of reviewed articles	Geog. area limit	Period	Criteria for selection of articles	Industries	Approach	Research quality evaluated and rated	Classification framework for individual vs org programs	No and % of reviewed articles – organisational intervention	Conclusions about effectiveness and org. vs individual interventions
Bunce and Stephenson, 2000 (repeat of Van der Hek & Plomp, Murphy 1996 and Bunce 1997)	27	Intl	1980–97	Only individual level outcome measures; n>10; full intervention; some evaluation	Range	Statistical change	Studies selected on the basis of reporting evaluation measures; only 10 out of 27 studies considered to have optimal level of statistical power	Studies only with individual measures selected; noted if reduction or prevention of stress were targeted; reported only if intervention procedure was identified or theoretical background was provided	None reported	16 out of 49 (33%) measures (14 studies) showed meaningful change. 6 out of 49 measures showed reliable change
van der Klink <i>et al.</i> 2001	48	Intl	1977–96	Studies had to be specific designed to prevent or reduce stress; working population	Wide range of industries	Meta-analytic technique	Only experimental of quasi-experimental studies (selected from identical populations) included outcome variables had to be well defined and reliable	Classified by four categories of interventions: organisational, multi-modal, cognitive-behavioural and relaxation	Five out of 48 studies with org. focus	Small overall effect of d=0.34; when broken down by intervention type: cognitive-behavioural types had the greatest effect (d=0.68) followed by multi-modal (d=0.51)
Jordan <i>et al</i> 2003 (HSE Beacons of Excellence study)	74	Intl	1990–2001	Only with evaluations Min n=30; working population; Min 3-star research rating	Wide range	Case study approach; research quality and good practice success factors identified by expert panel	Murphy's 5-star research rating; 24% achieved 5-star rating	Classified into three categories: (I, O and I/O) then broken down to more specific 5-8 interventions in each category	6 = only O 14 = O and O/I 9 = O, I, and O/I 39% - some org level intervention	More comprehensive strategies (I/O and O cats) more likely to lead to improvements in both individual health and org performance; individually based programs have some immediate benefits but no long-term effects; tendency for short-time frame evaluations

Authors	No of reviewed articles	Geog. area limit	Period	Criteria for selection of articles	Industries	Approach	Research quality evaluated and rated	Classification framework for individual vs org programs	No and % of reviewed articles – organisational intervention	Conclusions about effectiveness and org. vs individual interventions
Mimura and Griffiths (2003)	10	Intl	1990–2002	Two interventions compared to each other or control; outcomes measured	Nurses	Narrative	Categorised into placebo or control groups	Two categories: environmental and personnel support interventions	Three out of 10 classified as 'environmental management' interventions	'Environmental change' interventions are possibly or potentially effective; more evidence for the effectiveness of 'personnel support' for reducing stress amongst nurses, however not possible to determine what kind of approach is more effective
Caulfield <i>et al.</i> (2004)	6	Australia	1993–, 2003	Specific intervention – implemented and evaluated	All public sector (inc. nurses, correctional officers, police and fire fighters)	Two independent reviewers using the descriptive framework	<ul style="list-style-type: none"> • 1 to 5-star rating • 1 out of 6 given a 5-star rating • 1 out of 6 given a 4-star rating 	Primary-secondary-tertiary matrix proposed but only classified by individual vs org. responsibility for implementation	1 out of 6 studies with org. focus	Individually based programs do not perform well at reducing stress; Org-based intervention produced better training seminars, produced better coping
Blewett <i>et al.</i> (2006)	40 (inc. 28 from Jordan <i>et al.</i> , 2003, and 8 from Mimura and Griffiths, 2003)	Intl with focus in Australia	1990–2004	Same as Jordan <i>et al.</i> , 2003	Health and Community Sector	Narrative	5-star rating; 9 out of 40 were of the highest rating – most of which were individual	Classified into O, I and O/I categories	One out of 40 was solely O focused (2.4%); found fewer O-interventions than Jordan <i>et al.</i> ; 3 (7.3%) = I/O category; 6 (14.6%) = O and I/O.	Primary intervention is more effective. Evidence strongly supports the efficacy of approaches combining I and I/O interventions. More comprehensive interventions are more effective. Individual focused interventions had short evaluation timeframe.
LaMontagne <i>et al.</i> , 2006 (VicHealth)	95	Intl	1990–2005	Same as Jordan <i>et al.</i> , 2003	Wide range	Meta-analytic	5-star rating, only 3 stars included	Classified into O, I and E categories. Also rated systems approach as high, moderate and low	31 of 95 (33%) reported as high systems approaches	27 out of 31 studies classified as 'high systems' reported favourable organisational outcome changes

Authors	No of reviewed articles	Geog. area limit	Period	Criteria for selection of articles	Industries	Approach	Research quality evaluated and rated	Classification framework for individual vs org programs	No and % of reviewed articles – organisational intervention	Conclusions about effectiveness and org. vs individual interventions
Murta <i>et al.</i> , 2007	84 studies	Intl (58%-USA, 25% - Europe, 9.6% - UK, 5.8% - Aus & NZ; 1.9% - Asia)	1977-2003	Stress mgt interventions with an outcome evaluation	Range of industries	Data synthesis and qualitative content analysis – Focus on process evaluation,	Experimental, Quasi-experimental and non-experimental designs	Individual, Organisational, Interface (e.g. relationships at work, person-envt fit, role issues or participation) or combined (individual + others)	2 (3.8%) were organisational-focused; 9 (17.3%) involved interface and 4 (7.7%) were combined	Quality of process evaluation is incomplete; Insufficient evidence to identify process predictors
Richardson and Rothstein, 2008	36 studies (55 SMLs) inc. 19 in van der Klink <i>et al.</i> , 2001	2/3 US and 1/3 other countries	1977–2006	Experimental evaluation Working population Random controls	Wide range of occupations	Meta-analytic technique, based on van der Klink <i>et al.</i> , 2001	Included only randomised controlled studies	Classified by five categories of interventions: organisational, multi-modal, cognitive-behavioural (CBT), relaxation and alternative (a selection of individual programs)	Eight considered primary; 5 out of 55 classified as organisational	Largest effect in CBT studies (d=1.164), with organisational being least effective (d=0.239); single component interventions more effective than multiple ones; size of benefit also depends on measures used
Egan <i>et al.</i> , 2009	103 studies	Intl	1991-2006	Organisational level workplace interventions	Range of industries	Implementation appraisal, a specially developed checklist and unstructured reading of text	Appraisals of implementations based on ten qualitative criteria	Four types of interventions: employee participation, changing job tasks, shift changes and compressed working weeks)	100% organisational interventions in 4 categories	47 (45%) reported at least one positive health outcome; In most articles, authors presented brief and anecdotal reports of implementation.
David, A.R & Szamoskozi, S. 2011	23 studies	Intl	1982-2008	Rational Emotional Behavioral Therapy (REBT)	Range of industries	Quantitative meta-analysis	Sufficient data reported, and control groups included	Only individual CBT based interventions selected, by design	N/A	Overall weighted effect size (d=-0.81) CBT only effect (D=-0.52) and REBT (D=-0.52)
Huibing, <i>et al.</i> , 2013	8 studies	Intl	2003-2012	Meditation intervention program	Health industry - nurses	Qualitative analysis	Quantitative or mixed – method design	Different types of mediation programs classified	N/A	3 studies reported statistically significant improvement in stress levels.

4.6.3 Discussion of effectiveness

There is evidence from the reviews that individual approaches are effective to varying degrees in reducing the level of experienced stress. Studies focusing on individual level interventions tend to evaluate their effects within a short time frame, typically up to three months following the intervention and measure the outcomes as reported by individuals. Subject to these limitations, it is known that CBT-based preventive approaches to training have produced a moderate positive effect for the individuals' stress outcomes (van der Klink *et al.*, 2001). Many other studies reporting individual interventions have also found reduced stress effects for individuals but, most of these types of interventions do not utilise organisational measures and hence do not report effects at the organisational level (Richardson & Rothstein, 2008).

Few studies employed organisational level measures. In an example of such a study, the researchers found that improving working conditions through job redesign, monitoring psychological disorders and risk factors, and improving psychological health services resulted in positive outcomes for correctional officers. These included a significant reduction in the number of work stress claims, reduction in expenditure on the worker's compensation budget, and increased utilisation of the staff counsellor (Dollard, Forgan & Winefield, 1998). This is consistent with other reviews, most of which acknowledge the need to address both the organisational causes of work stress and their effects on individuals, to gain most positive outcomes (Giga *et al.*, 2003a).

Interventions are mostly classified by various researchers as organisational, however, Rothstein and Richardson (2008) classified only five interventions as organisational, out of 55 interventions reported by 36 different studies, and included the following approach in the organisational category:

- 'innovation promotion' program: goal setting, participatory action, and planning to enhance problem-focused coping;
- social support group to enhance coping abilities; and
- introduction of staff meetings to increase staff participation.

None of these appear to be systemic in nature.

Systemic approaches, integrating both individual and organisational levels and all three categories, primary, secondary and tertiary have proven to be the most effective (LaMontagne *et al.*, 2006). Out of the source studies classified as 'high systems' and using organisational evaluation measures, 93% reported favourable results. This finding indicates that prevention of occupational stress is achievable when hazards are systemically identified and controlled within the workplace. LaMontagne *et al.* (2006) compared 95 studies, classifying them into three levels of taking a systems approach: low, moderate and high, and found 31 to be 'high level'. Their conclusion was that the available evidence indicates that high systems approaches are the most effective in addressing the organisational and individual impacts of job stress. This is consistent with other reviews, most of which acknowledge the need to address both the organisational causes of work stress and their effects on individuals to gain most positive outcomes, for example, in the HSE commissioned study examining 135 evaluation studies (Jordan *et al.*, 2003).

In a rare example of a study utilising organisational outcome measures, the results of the organisation-focused intervention reported were more positive than the individual-focused interventions (Dollard, Forgan & Winefield, 1998). In this study, the researchers found that improving working conditions through job redesign, monitoring psychological disorders and risk factors, and improving psychological health services resulted in positive outcomes for correctional officers. These included a significant reduction in the number of work stress claims, reduction in expenditure on the worker's compensation budget, and increased utilisation of the staff counsellor.

One of the reasons proposed for the variability of results reporting the effectiveness of risk management approaches to preventing stress is that focusing on a specific hazard area may not address underlying leadership and management practices and other aspects of organisational climate. The results of some studies showed that substantial improvements in occupational wellbeing will only be achieved if those organisational aspects are addressed (Cotton & Hart, 2003).

Egan, Bambra and their research team in Scotland used an “umbrella” review of evaluation studies to map health effects of interventions which aim to alter the psychosocial work environment, with a particular focus on differential impacts by socio-economic status, gender, ethnicity, or age. Overall, their review suggested that organisational level changes to the psychosocial work environment can have important and generally beneficial effects on health. Also, when taken together, although tentatively they found that organisational workplace interventions may also have the potential to have an impact on health inequalities amongst employees, (Bambra *et al.*, 2009).

While work stress intervention is recognised to be complex because of the organisational context within which it occurs and emergent research in this area, there is sufficient data to conclude that primary level interventions combined with secondary interventions or systemic interventions are likely to succeed in producing organisational outcomes. It is true especially for those programs that are based on solid interventions. Certain individual based programs, especially those based on CBT techniques are likely to produce better health outcomes for employees, (Randall and Neilsen, 2010). It is also convincingly demonstrated that participative approach enhances the chances of success and that the changes resulting from the intervention will be meaningful and integrated into the organisational culture, (Semmer, 2006).

While this literature review confirmed that a systemic approach to work stress prevention is preferable and consistent with research findings over the last three decades, the question that needs to be considered is whether organisations have responded to these significant findings by adopting such approaches and, if not, what has prevented them from doing so. This thesis fills the gap of knowledge relating to both of these questions. Possible barriers to organisations adopting systemic approaches currently known and identified in the literature review, undertaken in Study 1, are considered in the next section.

4.7 Barriers to systemic stress prevention programs

As organisations appear reluctant to adopt systemic approaches to stress prevention, despite its high cost and apparent impact on their performance, it must be possible to identify such barriers to their adoption. One of the barriers has already been detected in the state and approach of current research in this area, which is agreed to be voluminous, disparate and at times contradictory (Jordan *et al.*, 2003). Managers and organisational decision makers are unlikely to invest much energy in sourcing, processing and evaluating a large body of scientific data as a basis for their policy making. Thus they tend to rely on anecdotal evidence or partial information gained through industry communication forums.

The following key barriers to employers adopting systemic approaches have been identified (Noblet, 2003, quoting Shain, 1995):

- lack of information on how psychosocial work characteristics can influence health;
- not having the knowledge to identify or address organisational issues; and
- feeling that organisational interventions are the exclusive domain of management and recommending such interventions may be trespassing on management rights.

Most stress intervention studies evaluating their effectiveness do not take into account the complexities of organisational systems and their functionality. The assumption made by systemic stress prevention is the capacity of the organisation to engage in managing change arising from the stress prevention activities such as risk assessment. For such changes to take place or even for the assessment to be conducted with full employees' participation, some power sharing between management and employees is necessary.

Most intervention studies are limited to the content of their programs and do not consider the process which is often just as important within the organisational context as what is being done (Griffiths, 1995; Murphy, 1988; Semmer, 2006). Such a process which impacts stress intervention was defined by Nytrö *et al.*, (2000) as: "individual, collective, or management perceptions and actions in implementing

any intervention and their influence on the overall result of the intervention” (2000:214). Traditionally, such interventions often relied on employees’ collective activity. This can be observed in “contingent separation (both at the level of state regulation and in terms of workplace practice) between industrial relations and health, environment and safety in industrialized countries” (Nytrö *et al.*, 2000:218). Thus it is possible that such separation is also reflected in the organisational cultures preventing effective discussion and planning of systemic stress prevention programs, as managers perceive it to be the domain of collective activity.

Handy (1988) identified the influence of organisational structures and power relations on stress interventions. Such structures are linked to disparities in power between employers and employees. Nytrö *et al.*, (2000) proposed that this provides “a cogent explanation for the individualized and managerialist focus of most occupational stress interventions and has strong implications for the nature and management of participatory processes if they are to counteract power imbalances” (2000:218). He therefore proposed a fundamental step to intervention programs: to include education of managers about the complex mechanisms behind the development of stress and illness at work and to convince them of the importance of sharing power and conducting systemic and organisational prevention.

Thus the organisational cultures and structures, particularly in the area of power sharing and their capability for effective employee consultation, need to be considered when introducing any stress prevention programs. If these are not understood before change initiatives are introduced, they are unlikely to be successful (Schein, 1985).

This thesis proposes that stress prevention initiatives are not conceptualised in terms of organisational change and hence do not have adequate planning, management involvement or integration with other organisational functions. As such, they can only succeed in a local group/ team context and/or on a short-term scale. It is likely that many evaluations of systemic interventions are not reported by organisations because they do not produce the desired results. Nytrö *et al.* (2000) points out that learning from organisational failures, however, is an important element in bringing about desired change.

Landsbergis and Vivona Vaughan (1995), from the conclusions of their intervention study, suggested improvements in the domain of organisational processes and structures, and proposed the following be considered when introducing such interventions to improve the outcomes:

1. formal involvement of unions;
2. integration of the intervention with ongoing organisational development projects and reorganisations;
3. establishment of structures for good communication between local participants;
4. development of implementation plans that involve the entire organisation;
5. promotion of the view that the intervention is an ongoing activity of the organisation and not a time-limited project; and
6. completion of a cost-benefit analysis.

In telephone surveys of more than 1000 private and public organisations (per study), using stratified samples to ensure representation of organisations of different sizes, researchers have demonstrated the progressive implementation of internal control in Norway since 1992 (Nytrö *et al.*, 1998; Saksvik & Nytrö, 1996; Saksvik *et al.*, 2003). Implementation has gradually progressed from 8% (in 1993) to 42% (in 1996) and 47% (in 1999). In the 1996 study, Nytrö *et al.* (1998) observed that the strongest predictor of success in managing OHS was whether an organisation had personnel competent in OHS and with professional training. It appeared that successfully implementing internal control required access to OHS expertise. Also important was external pressure exerted by inspectors, and by business partners or customers (Nytrö *et al.*, 1998: 304). The biggest barrier to implementation of internal control amongst small and medium businesses, in the early years, was a perception that internal control needed to involve a big and complicated system (Torvatn, 1997, cited by Nytrö *et al.*, 1998: 305).

Reviewers of intervention effectiveness studies often placed more emphasis on appraising the methodology of evaluations rather than the intervention itself, its process or context until recently (Egan *et al.*, 2009). As it has been recognised that

such interventions are far more complex social interventions, more recent reviews included broader evaluation dimensions of process, context and reporting. For example, a thematic checklist was used to evaluate the studies along the dimensions of management motivation for intervention, planning consultations, support by managers and employees as well as the level of experience in such interventions (Egan *et al.*, 2009).

In summary, the barriers to the adoption of systemic interventions as identified through the meta-analytic studies concern the inadequacies of research techniques, inconsistencies of the selected variables resulting in tentative conclusions. Such evaluations have also been found lacking in fully taking into account the complexities of organisations. More qualitative research emerging in the area of evaluating intervention process and structure is likely to contribute to more comprehensive knowledge of the effectiveness of interventions.

4.8 Summary

This chapter addressed the first preliminary assumption underpinning the key research question, namely: does the current literature support the claim that systemic prevention approaches are effective?

This chapter commenced with a detailed review of the background literature on work stress interventions. It provided a number of classifications of intervention types, with the principle differences appearing between their individual and organisational aspects. A systemic approach to intervention was also described. Having identified and categorised different intervention approaches, the chapter focused on research into their effectiveness. A structured literature review of meta-analyses of the intervention effectiveness literature published during the last 30 years of research was carried out and its findings reported.

The literature review revealed a low number of reported systemic and organisational approaches to workplace stress interventions and there are methodological limitations to many evaluations in such approaches. It confirmed more research being reported of individual interventions. Most importantly, this study established

that their effectiveness is enhanced when systemic, that is both organisational and individual approaches are implemented. Conclusions from this study were also drawn about the likely barriers to the implementation of systemic prevention programs in organisations.

The next chapter provides a comparison between a systemic approach to the traditional OHS management and that related to psychological health in the workplace, focusing particularly on the risk management approach. Their systemic elements are compared and contrasted. The chapter then moves to a regulatory perspective on the management of work stress and psychological health within OHS regulatory frameworks.

This review, comprising Study 2, described in the methodology (Chapter 3, section 3.9.2), provides data relating to how each state and territory OHS jurisdiction in Australia regulates employers' management of psychological health in the workplace. The regulators' actual response is then studied through the analyses of two OHS jurisdictions' (Victoria and South Australia) prosecutions and convictions over a 10-year period.

The next chapter continues the analysis and testing of the preliminary assumptions of the key research question. The two preliminary issues addressed will relate to: (a) existing legislative and regulatory requirements for managing and/or preventing work stress and (b) how the regulatory bodies manage compliance with their guidelines for work stress prevention within OHS legislative frameworks.

5 Study 2: Regulatory perspective and risk management approach

5.1 Introduction

Chapter 2 provided background literature review relating to work stress research, establishing that the transactional model of stress is the prevailing theoretical concept. Having outlined the research methodology in Chapter 3, Chapter 4 described intervention approaches, concluding that organisational and integrated (systemic) programs deliver the best outcomes in terms of stress reduction and /or prevention. The preceding chapter (Chapter 4) introduced the risk management framework in the context of an organisational prevention strategy. This approach will be further elaborated in the context of the description of the survey of the extent to which organisations have adopted systemic intervention programs in chapter 6.

The focus of this chapter is the regulatory response to work stress prevention in the workplace. It presents Study 2, dealing with the legislative and regulatory aspects of managing psychological health in the workplace and preventing work stress. This line of enquiry encompasses two aspects: (1) a comparative review of the approaches to managing work stress in the OHS legislation and relevant regulations in each Australian state and territory as well as New Zealand is presented; and (2) the prosecutions in relation to psychological injuries conducted over the last decade in two OHS jurisdictions (Victoria and South Australia) are analysed.

Barriers to the adoption of a systemic approach to managing safety in the workplace are identified from the regulatory perspective. Some conclusions are drawn about the likely similarities between the barriers existing in the physical and psychological safety systems. The final summary section of this chapter draws conclusions from this study and relates it to the key research question.

5.2 Methodology for this Study

As described in Chapter 3 (section 3.9.2), the methodology of this Study included two phases: a review of regulations and analysis of compliance. Each of these is described in more detail in the following subsections.

5.2.1 Review of regulations

The first phase of this Study involved a review of Australian and New Zealand OHS regulations relating to the management of psychological health in the workplace.

The New Zealand data has been included in this study since the jurisdictions of both countries closely interact with each other and are often included in comparisons of legislative initiatives and data analysis. For example SafeWork Australia (2010) publishes comparisons of workers' compensation arrangements from time to time.

The following OHS jurisdictions were interrogated:

- All Australian states and territories
- Australian Commonwealth
- New Zealand.

The sources of data of this documentation encompassed all the OHS laws and related regulations and guidelines, from each of the above jurisdictions including the following:

- Acts of Parliament governing employers' obligations to provide safe work environments (sourced from: <http://www.austlii.edu.au>).
- Regulations and codes of practice relating to managing or preventing work stress published by relevant government authorities under OHS legislation.
- Guidelines, guidance notes and other publications relevant to the management of work stress, psychological health, fatigue or workplace bullying published by the authorities responsible for this area.

The data documents were sourced from the official government websites responsible for publishing the acts of parliament and from the websites of the authorities responsible for managing OHS in each selected jurisdiction area. These comprised:

- www.safeworkaustralia.gov.au/
- www.workcover.nsw.gov.au
- www.worksafe.vic.gov.au/
- www.safework.sa.gov.au
- www.worksafe.nt.gov.au
- www.commerce.wa.gov.au/WorkSafe/
- www.worksafe.act.gov.au/health_safety
- www.worksafe.tas.gov.au
- www.deir.qld.gov.au/workplace/index.htm
- www.osh.govt.nz.

These documents were viewed during January 2011 and March 2013.

5.2.2 Analysis of prosecutions

The second phase of this study involved analysing the application of the legal requirements as articulated in legislation, related regulations and guidelines. The level of enforcement was analysed in Victoria and South Australia in the area of non-physical injuries in the 10-year period between 2001 and 2011 (for Victoria: 2003–2010; for South Australia: 2001–2011). These jurisdictions were selected because their legislative frameworks had the most explicit requirements for managing psychological health in the workplace.

The number of prosecutions and penalties issued for all breaches of OHS legislation were obtained from various databases and publications available from the government bodies responsible for enforcing these laws:

- WorkSafe Victoria
- SafeWork South Australia.

WorkSafe Victoria is responsible for prosecuting breaches of the *Occupational Health and Safety Act 2004*, the *Accident Compensation Act 1985*, the *Dangerous Goods Act 1985*, the *Equipment (Public Safety Act) 1994*, and the regulations made under each Act.

SafeWork South Australia administers the *Occupational Health, Safety and Welfare Act 2004* and industrial relations (IR) legislation, including the investigation of complaints of workplace bullying through its OHS inspectorate functions and prosecutions under this Act.

The sources of data included:

- Summary of prosecutions brought by the Victorian WorkCover Authority – annual reports.
- These reports claimed to detail all prosecutions under the *Victorian OHS Act 2004* and regulations. While most cases involve employers in workplaces that fail to provide safe working environments, the summaries also included cases where the Victorian WorkCover Authority has prosecuted officers of companies and employees who fall short of their obligations. The summaries of prosecutions include those resulting in a plea of guilty or a finding of guilt against an accused party are published.
- Enforcement outcomes, published on WorkCover Victoria website: <http://www1.worksafe.vic.gov.au/vwa/vwa097-002.nsf/content>. (It was noted that access to this database has been restricted through password protection since the data was initially downloaded in March 2013.)
- Enforcements and convictions database published on the WorkSafe SA website: http://www.safework.sa.gov.au/show_page.jsp?id=2463 viewed 10 January 2012 and updated on 11 March 2013.

The description of each of the prosecutions and the relevant section of the Act were then analysed to determine the extent to which these breaches were related to a psychological injury or illness. Further, the penalty amounts allocated in each prosecution were analysed to determine the value of financial penalties relating to the areas of psychological injuries.

Additional data was also sourced from the submission of the SafeWork South Australia to the Commonwealth Government's House of Representatives Standing Committee on Education and Employment Review into Bullying in the Workplace.

5.3 A review of Legislation/ Regulations re work stress

5.3.1 Categories of laws relevant to work stress

There are a number of different laws governing employers' obligations and responses relating to work stress in Australia and other countries with the British legislative system. They can be generally classified into the following categories:

- Workers' compensation – dealing with individual employees' claims for medical expenses and salary replacement due to a work-related psychological injury, commonly referred to as 'stress claims'.
- Civil law of duty of care due to a relationship between the employer and employee and the employer's duty to provide a safe working environment.
- OHS laws, involving both criminal and civil aspects, placing general obligations on employers to provide a workplace that is free of risk to employees' health as far as practicable. These legislative instruments also include OHS Regulations for specific work contexts such as working in confined spaces, managing fatigue or other aspects of psychological health
- Discrimination and Equal Opportunity laws relating to specifically defined actions such as sexual harassment, victimisation or discrimination which may involve a negative psychological health outcome.
- Bullying and Occupational Violence laws which in various jurisdictions may involve Crime Acts (e.g. in the case of *Crimes Amendment (Bullying) Act, 2011*, popularly referred to as 'Brodie's Law' in Victoria commemorating the name of the victim of a particularly public and distressing bullying case, OHS Laws or Regulations (e.g. in the case of the South Australian OHS Act and NSW Guidelines for prevention and management of bullying in the workplace) or Industrial Relations (e.g. in Queensland).
- Common law of torts recognising the right of any person to seek redress in respect of negligently inflicted 'pure' psychological harm or damage (McInerney, 2009).

Employers have legal responsibilities to ensure health and safety of their employees, which includes assessing risks and controlling them. Health, either explicitly or

implicitly, includes psychological health. Employers can face both civil and criminal prosecution for negligence in breaching these duties when employees suffer from work stress (Ashton, 1999; Earnshaw & Cooper, 1996). The role of government OHS authorities is to monitor and regulate employers' compliance with these legislative provisions.

The Australian OHS legal framework has largely adopted the UK Robens' model, based on the recommendations of a British Government Committee of Inquiry into Health and Safety at Work chaired by Lord Robens in 1972 (Robens, 1972). This model was based on the following key principles:

- A single enabling Act, which would establish broad procedures and standards, to be administered by a single regulatory agency and inspectorate.
- A transition from the traditional command-and-control regime to a self-regulating system, founded upon the acceptance and exercise of responsibility for OHS at all levels within industry and commerce, particularly by directors and senior managers.
- A systematic, rather than ad hoc approach to prevention.
- Provision for greater employee participation in improving and maintaining health and safety, because "real progress is impossible without the full co-operation and commitment of all employees" (Maxwell, 2004:97).

This research focuses on the systemic prevention of work stress and in this context OHS laws and regulations are most relevant, as they have the greatest potential to proactively mandate a risk management or other work stress intervention regime. It is thus a review of the OHS Acts in Australia and their relevance to work stress that has been undertaken. All of the different legal paths are, however, interrelated in that the prosecutions and publicity in one case can impact others by raising the employers' and/or legislators' awareness of the human and economic costs involved in work stress. An example of such an interaction between legal initiatives was the case, for example, in the United Kingdom in *John Walker vs. Northumberland County Council*, which became a precedent for the British response to managing work stress in the late 1990s (Clarke & Cooper, 2004). In this case, a local council

worker successfully sued his employer for a breach of their common-law duty of care to provide a safe working environment, demonstrated through his high workload over an extended period of time. In the ruling, the judge for the first time clearly articulated the employer's duty of care extending to psychiatric health, not just physical health (Earnshaw & Cooper, 1996). As a result of the consequent publicity leading to increased awareness emanating from this case, the UK has spearheaded a number of initiatives in the area of managing stress in the workplace.

5.3.2 International developments

As the evidence for the effectiveness of systemic approaches to preventing work has gathered momentum; there has been a growing recognition that organisations need to be encouraged to manage this issue in alignment with the commitment to preventing all injuries through OHS management systems and their regulatory regimes. Governments around the world needed to respond to the challenge of increased work injury costs, driven to a large extent by the proportion of psychological injury linked to work stress. While the direct costs related to the workers' compensation claims have been accounted for, other indirect mental and physical health costs associated with psychosocial risk factors, such as sick leave, are underestimated in the official statistics. The underreporting of costs and incidents related to psychosocial risk factors could be responsible for the softer approach to regulation in this area, compared to other physical hazards such as manual handling or exposure to hazardous chemicals. Unlike the response to physical hazards, most jurisdictions, including Australia, New Zealand, European countries and North and South America, have relied on general provisions of duty of care in OHS laws rather than developing specific regulations for dealing with psychosocial hazards (Lippel & Quinlan, 2011).

One of the early international initiatives in systematic OHS management was the European Union Framework Directive on "measures to encourage the improvement of safety and health of workers at work" (European Commission, 1989). This directive contains general principles and processes for the management of OHS, with the overall aim of "prevention of occupational risks, the protection of safety and health, the elimination of risk, the informing, consultation, balanced

participation in accordance with national laws and/ or practices and training of workers and their representatives” (S1.1.2, p.4). It articulated the employer’s duty to develop policies and implement prevention principles which include avoiding risks, evaluating the risks which cannot be avoided, and combating the risks at source.

It is of interest to note this legislation model was sufficiently comprehensive to include prevention through

adapting the work of work design to the individual, especially as regards the design of work places, the choice of work equipment and the choice of working and production methods, with a view, in particular, to alleviating monotonous work and work at a predetermined work-rate and to reducing their effect on health. It also referred to the duty of developing a coherent overall prevention policy which covers technology, organisation of work, working conditions, social relationships and the influence of factors related to the working environment (S2.6.2(d), p.5).

All of these aspects have been subsequently identified as work stress hazards (HSE, 2007). Despite the recognition of some of the psychosocial hazardous aspects of work in this early example of model OHS legislation, there are no specific mentions of psychological health, mental health or work stress.

Since the introduction of this framework there have been other agreements and directives specifically addressing work stress in Europe generated by the European Agency for Safety and Health at Work (EU-OSHA) and internationally by World the Health Organization (WHO) and International Labour Organisation (ILO). Some of the approaches to manage work stress include legal regulations (e.g. national legislation, EU directives and ILO conventions) and non-binding, ‘soft’ standards, agreements and specifications. A recent review of the European regulatory standards confirmed that the terms ‘stress’ and ‘psychosocial risks’ are not mentioned explicitly in most pieces of legislation leading to lack of clarity on the terminology used. “While voluntary standards seek to address this, very few provide specific guidance on the process of psychosocial risk management to enable

organisations to manage psychosocial risks successfully” (Leka *et al.*, 2011a: 1047). Another recent comprehensive survey of Europe stakeholders of OHS legislation, including employers’ associations, trade unions and government institutions from 21 countries in the European Union found that the level of application of the 1989 European Directive for the assessment and management of work-related stress was largely reported as inadequate (Iavicoli *et al.*, 2011).

While OHS legal frameworks in most European countries currently refer to psychosocial risk factors being the cause of work-related stress only a few have specific regulations, and none of them had national legislation mandating compliance in this area (EU-OSHA, 2002). Following the implementation of recent framework agreements between the European social partners, national legislation related to psychosocial issues has also been developed in a few member states. For instance, the Italian OHS legislation (introduced in April 2008) explicitly mentions work-related stress, which has to be included in any risk assessment (Iavicoli *et al.*, 2014)

One of the significant projects aimed to create a consistent approach to managing stress in Europe was the development of a standard for Psychosocial Risk Management in the workplace – European Framework (referred to as PRIMA-EF). The PRIMA-EF development process, during the period 2004 to 2008, signalled an increased commitment from the European Commission to address psychosocial issues at work (Leka, Cox & Zwetsloot, 2008). This framework has provided a basis for more systematic evaluations of how effective soft regulatory guidelines have been in preventing and managing work stress. Up to this point, it is known that legal developments have not had the impact anticipated both by experts and policy makers at the practice level, with the primary reasons being the gap between policy and practice, lack of awareness and expertise, research and appropriate infrastructure (Leka *et al.*, 2010). Despite the commitment expressed in various documents by the European Commission, World Health Organization and the International Labour Organization, there is an ongoing need to implement these intentions.

In the UK, the calls for laws specifically regulating work stress prevention began in the 1990s with the HSE quantifying the costs of work stress and arguing that organisations need to assess the risk posed by psychosocial hazards as well as physical hazards. Generally, OHS laws have not been applied to psychological health, even though their language was inclusive of all health. While there was a strong support for legislation specific to work-related stress in the UK, or for an Approved Code of Practice, the ultimate decision by that jurisdiction was to develop a set of management standards as a guide for employers to apply a risk management approach (HSE, 2006; Mackay *et al.*, 2004). There has also been some progress towards the development of industry standard relating to the management of psychosocial risks in the workplace, by the British Standards Institution. It has, however, stopped short of developing a standard by creating a guide, or a “publicly available specification” instead which takes the form of guidance and recommendations (BSI, 2011).

In another specific area of work stress, relating to mental injuries arising from exposure to traumatic events, the UK Law Commission had concluded there was “no need for legislation specifically dealing with liability for psychiatric illness suffered through stress at work” (Law Commission, 1998: 111). In reaching their conclusion the Commission considered the Walker v Northumberland County Council case, which had set a precedent in the UK common law relating to employer’s negligence.

Failure to act appropriately may lead to any resultant psychiatric injury being considered foreseeable. In failing to take steps that are reasonable in the circumstances, the employer may be in breach of his duty of care. The issue is whether the employer should have taken positive steps to safeguard the employee from harm: his sins are those of omission rather than commission (Hale LJ in *Hatton v Sutherland* [2002] EWCA Civ 76, para 23) (quoted in HSE, 2006: 14).

Thus it has been generally established that employers have an obligation to take reasonable care for the psychological health of their employees. Employers’ exposure to legal liability for failing to do so, when an employee claims

psychological injury, relating to work stress, is limited by the degree to which the injury could be foreseeable and to which work psychosocial hazards materially contributed to its increased risk, without this risk being reasonably managed (Buchan, 2001; HSE, 2006).

The government in Canada also responded recently to the recent national debate of employers' responsibility for providing a psychologically safe workplace, championed by the Mental Health Commission. The discussion, similar to the European and UK experience, focused on the hazards or risks in the workplace that could potentially cause psychological injury rather than the individual mental health of employee. In mid-2012, a set of national standards for providing a psychologically safe workplace was published, following three years of consultations with employers, mental health professionals, researchers and regulators (MHCC, 2012).

One of the reasons for the lack of regulatory frameworks for managing work stress worldwide was suggested to be the workers' compensation boards or their equivalents being relatively distant and 'invisible' to the respective regulators, and thus having little experience of the issues and costs. There appears to be a progression of regulatory development, where jurisdictions first focus on the area of workplace violence and bullying followed by more specific regulations for other psychosocial risks (Lippel & Quinlan, 2011).

5.3.3 Regulatory developments in Australia

The development of legislative and regulatory framework in Australia has followed the principles set by the UK in that no specific legislation to deal with work stress has been enacted, and instead, a general OHS framework has been applied by almost all jurisdictions. The enactment and enforcement of OHS legislation is largely a state or territory responsibility. This approach has been limited to the development of various guidelines for employers and the application of a risk management framework to psychological health. In this paradigm, the mechanism of injury is treated in the same way as in physical injuries, recognising that the injury occurs as a result of the interaction between the individual and the

environment. In some jurisdictions, Health and Safety legislation was amended to include specific references to the meaning of health being inclusive of psychological health.

Jurisdictions prosecuting employers' failure to provide a work environment that is free from risk to psychological health in Australia, similar to the UK, rely on a general duty of care provisions. There is a prominent Australian case that bears some similarity to the John Walker case in the UK, (*Koehler v Cerebos Australia Ltd* [2005] HCA 15) in which the Australian High Court ruled that the employer was not responsible for a stress-related psychological injury because the injury was not foreseeable. Two factors instrumental in this decision were: the employee's agreement to undertake the work, and her subsequent failure to directly notify her employer of the risk and subsequent harm to her psychological health, posed by her work design. That is, although Koehler had frequently complained that her workload was unrealistic, and asked her employer to either increase her hours or reduce their expectations, she did not directly indicate that it was affecting her health. As such, the High Court ruled that Koehler's psycho-physical disorder was a risk that Cerebos could not have reasonably foreseen (Mendelson, 2005). There appears to be a high likelihood that with greater awareness of the need to identify psychosocial hazards and manage work stress risks, amongst employers and employees alike, the foreseeability of risk will be more easily established in the future.

As part of this research, a comprehensive study was undertaken of all the regulatory mechanisms for managing work stress in different states and territories of Australia and New Zealand (see table 5-1 for results). As shown in this table, all the Australian and New Zealand jurisdictions adopt risk management approaches as a way of ensuring a healthy work environment and all of them imply that mental health issues are encompassed by the same regulations as physical issues. Some do so explicitly, either through a general definitional inclusion (e.g. Victoria), general statements about psychological hazards (e.g. NSW and NZ) or references to specific psychosocial hazards (e.g. SA). The hazards that are most commonly singled out in OHS legislation are: bullying, occupational violence, fatigue and change (e.g. SA and NZ).

Table 5-1 Legislative instruments governing employers' obligations of duty of care for employees' psychological health in Australia and New Zealand

Jurisdiction	OHS legislative instruments	OHS Act/ Section outlining employers' duty of care	OHS Section outlining employers' risk management obligations	Specific references to employers' responsibilities for employees' psychological health	Related Guidelines and Regulations to managing occupational stress
Victoria	<i>Occupational Health and Safety Act, 2004</i> ; Occupational Health and Safety Regulations, 2007	S. 21 (1) An employer must, so far as is reasonably practicable, provide and maintain for employees of the employer a working environment that is safe and without risks to health	S. 35 of the <i>OHS Act 2004</i> requires the employer to consult with the employees when identifying hazards and assessing risks. S. 2b. .. obligation to eliminate, at the source, risks to the health, safety or welfare of employees and other persons at work	S. 5 clarifies the definition of health applying to the obligations of the entire OHS Act: " <u>Health includes psychological health</u> "	Stresswise – Preventing work-related stress, A guide for employers in the public sector, 2007. Preventing and responding to bullying at work
NSW	<i>Occupational Health and Safety Act 2000</i> ; Occupational Health And Safety Regulation, 2001	S. 8 (1) An employer must ensure the health, safety and welfare at work of all the employees of the employer	OHS Regulation 2001 requires of an employer to identify hazards, assess risks and eliminate or control risks to the health and safety of workers.	OHS Act S. 7 defines risks as attributable to: the manner of conducting an undertaking. OHS Regulations S. 9 (2) (b) mandates that <u>employer must take reasonable care to identify any foreseeable hazard and arising from: work practices, work systems and shift working arrangements (including hazardous processes, psychological hazards and fatigue related hazards)</u>	Risk Management Code of Practice, 2007 Prevention of Workplace Harassment Code of Practice 2004 Workplace Violence, 2002
Qld	<i>Workplace Health and Safety Act 1995</i> Workplace Health and Safety Regulation, 2008	S. 29 (1) An employer. has an obligation to ensure the workplace health and safety (..) of each of the person's workers	S. 22 (2) describes risk assessment and control obligations S. 30 (1) A person in control of a workplace has (...) obligations to ensure the risk of injury or illness from a workplace is minimised; <u>Risk Management Code of Practice 2007 – general application</u>	General application of the duty of care. Specific information provided for <u>harassment, fatigue and occupational violence</u> .	Prevention of Workplace Harassment Code of Practice 2004 Publications on occupational stress: risk management approach, Dept of Employment and Industrial Relations.

Jurisdiction	OHS legislative instruments	OHS Act/ Section outlining employers' duty of care	OHS Section outlining employers' risk management obligations	Specific references to employers' responsibilities for employees' psychological health	Related Guidelines and Regulations to managing occupational stress
Western Australia	<i>Occupational Safety and Health Act 1984</i> , .	S 19 (1) An employer shall, so far as is practicable, provide and maintain a working environment in which the employees are not exposed to hazards	S.3.1 outlines the requirement to conduct identification of hazards, assessing and addressing risks in the workplace	General application of OHS Act. Stress at Work publication states: <u>Stress becomes an occupational hazard if it adversely impacts on safety and health in the workplace</u> A Code of Practice – Violence, Aggression and Bullying outlines risk assessment requirements	Stress at work A Code of Practice for Prevention and Management Violence, Aggression and Bullying at Work
South Australia	<i>Occupational Health and safety and Welfare Act (SA) 1986</i>	S 19 (1) and S. 22. An employer must ensure that the employee is, while at work, safe from injury and risks to health	Risk control measures for work stress outlined in Safeguards Workplace Stress publication	S. 19 (3) (f) specifically mandates employers' responsibility for providing information and supervision to any employee who could be put at risk by a change in the workplace, S. 4 (4) of the Act deems workplace bullying an offence by defining an occupational health and safety matter Including <u>anything that affects a worker's general wellbeing at work</u>	Safeguards Workplace Stress – guidance note published by The Interagency Round Table on Workplace Bullying
Northern Territory	<i>Work Health Act 1986</i> Workplace Health and Safety Regulations	S. 29. Ultimate responsibility of employer for ensuring safe workplace is maintained	Risk management included in Regulations	Risk management related to stress described in managing stress in the workplace – A practical guide for managers	NTWorkSafe, Managing stress in the workplace – a practical guide for managers
ACT	<i>Work Safety Act 2008</i>	S 37 (1) An employer shall take all reasonably practicable steps to protect the health, safety and welfare at work of the employer's employees	General guidelines for risk management	General application	Guidance on workplace violence

Jurisdiction	OHS legislative instruments	OHS Act/ Section outlining employers' duty of care	OHS Section outlining employers' risk management obligations	Specific references to employers' responsibilities for employees' psychological health	Related Guidelines and Regulations to managing occupational stress
Tasmania	<i>Workplace Health and Safety Act 1995</i>	S 9 (1) An employer must, ensure so far as is reasonably practicable that the employee is, while at work, safe from injury and risks to health	S 32S. General OHS system requirement; S 32T. Consultation with workers; No specific provisions for risk management activities	General application	<u>Workplace Stress: A guide for employers and workers</u> , 2010. Referring to generic risk management principles and acknowledging that no specific regulations exist
Commonwealth	<i>Occupational Health and Safety Act, 1991</i>	S16 (1) An employer must take all reasonably practicable steps to protect the health and safety at work of the employer's employees	S. 16 (2A) 3 b arrangements relating to risk management to be in place OHS Code 2008, Part 1 outlines risk management process	Guidelines provide specific instructions on prevention and management of psychological injuries	Beyond working well: A better practice guide. A practical approach to prevention and management of psychological injury in the workplace. Bullying in the workplace – A guide for prevention for managers and supervisors
Harmonisation Project – National Uniform Laws	<i>Model OHS Act 2011</i>	S 19 (3). A person conducting a business or undertaking must ensure, so far as is reasonably practicable: (a) the provision and maintenance of a work environment without risks to health and safety	Schedule 3. 5. "Matters relating to hazards and risks including: (a) the prescribing of standards relating to the use of or exposure to any physical, biological, chemical or psychological hazard"	Subdivision 1. Definitions: "health means physical and psychological health"	Draft Code of Practice for preventing and managing fatigue in the workplace, 2011. Draft Code of Practice for preventing and responding to workplace bullying, 2011.
New Zealand	<i>Health, Safety in Employment Act</i>	S 6 Every employer shall take all practicable steps to ensure the safety of employees while at work	General guidelines for risk management	HSE Amendment 2003 clarified that "harm includes physical and <u>mental harm caused by work related stress</u> ", a person's behaviour may be an actual or potential cause or source of harm" that might result from "physical or mental fatigue"	Morale, Distress and Healthy Work, 2008

None of the jurisdictions created separate laws requiring the management of psychological health in the workplace or their risk management, and thus rely on the application of the general duty of care and the specific OHS requirements to provide a risk-free work environment to prevent and manage work stress. All of the actual legal instruments are inclusive of physical and psychological health. Also, none of the states or territories has published regulations or codes for managing or preventing work stress using their statutory power in a similar way to dealing with other hazards such as chemical hazards, manual handling or working in confined spaces. Instead all the jurisdictions published general guidelines, advisory or guidance notes issued for employers to promote the awareness of work stress issues and encourage them to apply risk management principles to psychological health.

The Productivity Commission (2010) in their Performance Benchmarking of OHS regulation in Australia concluded that “given the costs they impose, all jurisdictions give relatively less attention to psychosocial hazards than to physical hazards”. The following jurisdictional similarities and differences in managing psychosocial hazards were noted by the Productivity Commission report:

- While all jurisdictions imply a duty of care for employers and others to manage psychosocial hazards in OHS legislation, Victoria has clarified this responsibility by specifically including ‘psychological health’ in its definition of health, South Australia refers to inappropriate bullying behaviours in its Act and New South Wales includes the need to adapt the work environment to physiological and psychological needs in its Act and regulations.
- All jurisdictions provide guidance material on bullying and occupational violence but only Western Australia provides a code of practice on both.
- Queensland has a code directed at preventing bullying.
- All jurisdictions provide guidance material on fatigue though Tasmania and the ACT do not provide this in a separate publication.
- South Australia and Western Australia have codes related to working hours
- New South Wales and Victoria have produced harmonised guidance material on bullying and on fatigue.

Since completing the main part of this research, a new development has taken place in Australia in relation to harmonising OHS laws, with the objective to increase consistency in this legislative area across all states and territories. This project has involved the development of a model OHS Act following an extensive consultative process. This model has been adopted as a basis for OHS legislation by most but not all of the states. The model bill has also been scrutinised for its mandate for treatment of work stress management and the results are included in table 5-1. It can be concluded that the introduction of this model OHS bill has not added any greater clarity about how the responsibilities for providing an environment free from risk to psychological health, or are to be discharged or how risk management obligations apply to this area. This new model adopted the inclusion of psychological health in the definition of health, in line with a number of state Acts and recognised that a hazard can be of psychological nature in Schedule 3, listing Regulation making powers which include: “Matters relating to hazards and risks including: (a) the prescribing of standards relating to the use of or exposure to any physical, biological, chemical or psychological hazard” (Model Bill 23/6/2011, Schedule 3, Section 5). No regulations in this area, however, have been issued. The model bill itself made no reference to specific psychosocial hazards such as bullying, fatigue or occupational violence.

5.3.4 Regulatory developments in Victoria

Since the qualitative research reported in Chapter 6 of this thesis was particularly focused in Victoria, due to its earliest and prescriptive guidelines for prevention and management of work stress, this section provides more in-depth background to the regulatory development in this area in Victoria.

As various jurisdictions responded to the need to ensure that work stress prevention was managed through OHS legislation, inclusions were added to the definitions of health in some Australian jurisdictions. In Victoria, for example, as the OHS law was being reviewed in 2004, the revised legislation contained a subtle but significant change to the definition of health, that is: “health includes psychological health” (S5), without actually defining “psychological health”. It also provided in Section 158 (Regulations) for the Governor in Council to “make regulations for or

with respect to (...) prescribing standards relating to the use of or exposure to any physical, biological, chemical or psychological hazard” (S158.1 (i)). However, no actual Regulations have been issued relating to psychological hazards, other than publications of guidelines in the area of workplace bullying and stress prevention some years later. The lack of precise information about employers’ responsibilities in the area of psychological health was symbolically demonstrated in the Victorian Government publication describing the amendments to the Act (Guide to the Act), limiting the information about this change to one sentence which simply restated the definition and printed in parenthesis (WorkSafe Victoria, 2005, p.4).

While there were no regulations issued to cover psychological health in Victoria, there were guidance notes and educational materials published in three relevant areas:

- i. Preventing work-related stress, referred to as ‘Stresswise’ (WorkSafe Victoria, 2007a)
- ii. A handbook for workplaces. Controlling OHS hazards and risks (WorkSafe Victoria, 2007b)
- iii. Preventing and responding to bullying at work (WorkSafe Victoria and WorkCover NSW, 2009).

The first publication (‘Stresswise’) was most relevant and comprehensive in providing a framework, educational materials and tools for conducting risk assessment and controlling psychological hazards in line with its overall generic risk management approach. These guidelines, however, were explicitly limited to ‘public sector and community service’ organisations. As such, they were not communicated to the non-government sector although they were readily available on the WorkSafe Victoria website.

The second publication, while dealing with generic risk management methodology addressed psychological hazard by defining it as follows: “Events, systems of work or other circumstances that have the potential to lead to psychological and associated illness, including work-related stress, bullying, workplace violence and work-related fatigue” (p.4). It is important to note that in this definition, work stress and bullying are expressed as outcomes of an uncontrolled hazard (events, systems

of work and other circumstances). The first publication dealing with work stress specifically, however, defines the same issues (bullying, workplace violence and fatigue), demonstrating inconsistencies in the definitions and language at the very source of information provided to employers.

The last publication tackling workplace bullying is typical of most Australian state government responses to this psychosocial hazard. The recommended response and prevention approach is couched in the same risk management terms, and recommending the same methodology as for work stress prevention. It does not, however, identify bullying as a work stress or a psychological hazard despite the ‘Stresswise’ publication clearly listing bullying as one of the hazards. It is of interest to note that the first edition of this publication was released prior to the Victorian *OHS Act 2004* amendment, providing an explicit inclusion of psychological health into the definition of health and thus proving that the general OHS duty of care clause was sufficient for creating guidelines for dealing with psychosocial hazards. Further, the subsequent publication of the same guidelines in this jurisdiction (October 2012) removed specific references to risk management methodology and identification of underlying hazards. Instead, it limited the guidance for prevention to policies, procedures and training.

The Victorian Government has not met its self-imposed timeline to harmonise its OHS laws with other states. At the time of publishing in 2014, the previous commitment to bring its law into the new national model was delayed indefinitely. Given the similarities between the two legislative instruments (the current and proposed model) in relation to its treatment of work stress issues, it is not expected to have much impact in this area.

5.3.5 Regulatory developments in South Australia

South Australian OHS legislation has stood out from other states in that it provided for specific prevention and management of bullying, harassment and occupational violence. Most jurisdictions around the world have not provided regulation for this sort of psychosocial hazard directly in the OHS legislation, instead opting for developing instruments, guidelines and strategies (Lippel & Quinlan, 2011).

The South Australian *Occupational Health, Safety and Welfare Act 1986* has varied from any other OHS legislation in its treatment of specific psychosocial hazards in the following aspects:

- Change – Section 19 (3) (f) specifically mandated that employer had responsibility for providing information and supervision to any employee who could be put at risk by a change in the workplace.
- Bullying – Section 55A (1) and (2) defined Workplace Bullying (a) that is directed towards an employee or group of employees, that is repeated and systematic, and that a reasonable person, having regard to all of the circumstances, would expect to victimise, humiliate, undermine or threaten the employee or employees to whom the behaviour is directed; and (b) that creates a risk to health or safety. The definition of Workplace Bullying specifically excluded:
 - (a) reasonable action taken in a reasonable manner by an employer to transfer, demote, discipline, counsel, retrench or dismiss an employee;
 - (b) a decision by an employer, based on reasonable grounds, not to award or provide a promotion, transfer, or benefit in connection with an employee's employment;
 - (c) reasonable administrative action taken in a reasonable manner by an employer in connection with an employee's employment; or
 - (d) reasonable action taken in a reasonable manner under an Act affecting an employee.
- More generally, Section 4 (4) of this Act defined an occupational health and safety matter as including anything that affects a worker's general wellbeing at work, thus providing the definition of occupational health that was most inclusive of all issues potentially linked to work stress.

While the definitions of workplace bullying in the South Australian legislation were comparable to those offered by other jurisdictions, it was the only OHS Act with such inclusions explicitly written into the legal instrument rather than relying on other less formal guidelines, educational materials and guidance notes. Thus it has created an opportunity to study the impact of such prescriptive legislation on the

level of employers' compliance and the regulator's capacity to prosecute non-compliance.

Since the South Australian Government agreed to harmonise its OHS laws from 1 January 2013 with other states' legislation, it introduced the *Work Health and Safety Act 2012* which superseded the *Occupational Health, Safety and Welfare Act 1986*. In doing so, it has removed specific references to workplace bullying and change. It has also aligned the definition of health with other states to a very broad inclusion of psychological health, eliminating its reference to employees' wellbeing.

5.4 Response by regulators

While there are regulatory frameworks imposing on employers' general duty of care for their employees' health, including psychological health, and specific obligations to deal with work stress through risk management activities; there appears to be a vast difference between the regulators' response to breaches of these regulations in the area of physical and psychological health. Breaches of OHS legislation resulting in physical injuries are investigated by regulatory bodies leading to prosecutions and in some of these cases, convictions. Each OHS law has built in penalty clauses to deal with these scenarios. The Australian harmonised work health and safety model bill, for example, has penalties ranging from \$50,000 in the case of an individual (who is not conducting a business or undertaking) who fails to comply with their health and safety duty through to \$3M for a body corporate found to engage in reckless conduct as to the risk to an individual of death or serious injury or illness. There are also additional or alternative penalties of imprisonment for five years (Part 2, Division 5, Model Work Health and Safety Bill, 2011).

Apart from prosecutions, the regulator and its appointed inspectors have other avenues to deal with non-compliance issues. One of these is for inspectors to follow a dispute or issue resolution process, involving the health and safety representative who may issue a 'provision improvement notice' or a 'cease work' direction. Some disputes can also be referred for mediation, conciliation or arbitration.

Comcare, the regulator responsible for the Commonwealth and other self-insured employers under Commonwealth OHS legislation advises duty holders that a range of enforcement actions may apply when OHS legislative obligations are not met. Compliance with the OHS Act and its regulations is monitored and evaluated through Comcare investigations and OHS obligations are enforced through the following means:

- letters of statutory obligation;
- letters of warning;
- improvement notices;
- prohibition notices;
- declarations of contravention and pecuniary penalty orders;
- injunctions;
- remedial orders;
- enforceable undertakings;
- civil court proceedings; and
- criminal court prosecutions (Comcare, 2008).

While there has been a well-established history of implementing such tools of compliance for physical health, there have been few examples of these being applied by the regulators when dealing with psychological health or addressing work stress. Workplace visits and interventions by OHS inspectors dealing with psychosocial hazards have been found to be marginal to their activity. A recent Australian study of the inspectors' activities in the area of psychosocial risk factors, conducted between 2003 and 2007, revealed that inspectors often saw the issue as "problematic due to limited training, resourcing, constraints, deficiencies in regulation and fears of victimisation amongst workers" (Johnstone *et al.*, 2011: 547). They were also hindered by complex interactions between psychosocial risks and industrial relations issues. The overlap between them includes issues such as workload, staffing levels, schedule and hours of work and management/ worker relations. Since there are other Industrial Relations legislative and investigative frameworks, governed by other government jurisdictions, OHS inspectors tend to shy away from dealing with these issues (Johnstone *et al.*, 2011).

One of the commonly stated problems encountered by inspectors is that the psychosocial risks and their consequences are ‘invisible’ and therefore cannot be easily accommodated by the traditional methods of workplace inspections. New assessment and intervention tools are being called for, and there have also been reports that one of the hindrances is that the development of standards in this area has been resisted by employers (Quinlan, 2007).

While it has been acknowledged that there have been more general guidance materials produced by regulators, a missing link to successful execution of OHS laws in the area of psychosocial health appears to be a lack of training and skills of the OHS inspectorate staff. This issue has been recognised in other countries as well. A recent study of the implementation of anti-bullying legislation in Sweden, for example, concluded that the inspectorate’s response was hampered by the lack of training, competency building and clear implementation of strategies and protocols including reconciling confusion over individual versus organisational approaches to such issues (Hoel & Einarsen, 2010)

There are also few specific guidelines and regulations issued in relation to various psychosocial risks, despite the evidence of their links to adverse effects on employees’ health and safety. One of these is change, organisational restructuring or downsizing. Evidence links downsizing to poorer mental health outcomes, bullying and occupational violence. A recent study found that “while Australian regulators are aware of the problems posed by downsizing, they have made only modest efforts to pursue compliance with legislative duties, producing little guidance material that refers to restructuring and workloads (Quinlan, 2007). In interviews undertaken with regulators, the view expressed was that

the vast majority of employers failed to recognise work process changes associated with restructuring and failed to undertake risk assessment or consultation to meet their general duty obligations. Nevertheless, no agency had prosecuted an employer for failing to comply with these duties, in part because they believed it would be too difficult to establish a clear connection between a downsizing incident and a subsequent deterioration in OHS, (Quinlan 2007: 390).

No guidance material on downsizing/ restructuring to explain the obligations of employers have been produced,

nor have agencies established protocols for inspectors to check on employer compliance with risk assessment/consultation requirements, reinforcing the message and enabling the issuing of notices or other remedies on the basis of failure to comply with procedures established under legislation (something that would not require evidence that non-compliance harmed workers) (Quinlan 2007: 390).

A recent development in Australia, following a Commonwealth Government Senate inquiry into bullying in the workplace has been the authorisation of a Commonwealth industrial relations body, Fair Work Commission, to respond to allegations of bullying from employees. This is an additional avenue to State OHS regulatory bodies, that employees now have to seek to address their situation in the workplace which is at the same time, a psychosocial healthy safety issue. Fair Work Commission has the power to take action by issuing order to stop bullying from continuing, (Fair Work Commission, 2014)

One of the significant developments in Europe was a psychosocial risk inspection campaign by the Committee of Safety Labour Inspectors with the participation of 27 countries, led by Sweden during 2011-12. The inspections were conducted using a specifically developed tool for this campaign. Their final report presented indicated that on average 55 percent of the employers had undertaken a psychosocial risk assessment. There was a high variation in this percentage amongst countries. All countries noted that there was a need to take action on psychosocial risks. In just over 50 percent of the countries, the majority of the organisations complied with the legal requirements in this area. The most common action taken by the labour inspectors were advice and notices. Employers were fined only in two countries, while there were no prohibitions or prosecutions reported at all, (SLIC, 2012).

5.5 Study of prosecutions and convictions

This research included a review of all prosecutions and convictions reported by the regulation agencies in Victoria and South Australia, during the 10-year period of 2001–2010. Its purpose was to establish the extent to which these two jurisdictions responded to potential breaches of compliance with OHS laws relating to risks to psychological health as opposed to physical injuries. These two states were selected for this study, since they had OHS legislation in place specifically addressing psychological health.

The Victorian law explicitly included psychological health in the definition of health but relied on a general duty of care for any prosecution relating to any hazards. The South Australian law, was even more specific in relation to a few psychosocial hazards, most prominently workplace bullying. Under both jurisdictions workplace bullying falls within the scope of OHS legislation. In Victoria, the agency administering the OHS legislation is WorkSafe Victoria, and the South Australian agency, SafeWork SA administers both OHS and Industrial Relations legislation. Both of these agencies have the role of investigating complaints and prosecuting employing organisations for breaches of compliance through their inspectorate functions.

The study reported below relates to both Victoria and South Australia and involved a review of reports of all prosecutions and penalties imposed under their respective OHS legislation. A search was conducted within these reports for specific mentions within complaints, investigations or judgements using the following words: ‘psychological’, ‘psychosocial’, ‘stress’ and ‘bullying’. The results are presented in the following sections.

5.5.1 Victoria

Table 5-2 presents the results of prosecutions and penalties administered by WorkSafe Victoria during 2001–2010 under its mandate of administering OHS legislation. The total number of prosecutions under the Act averaged about 130 per year, peaking in 2003 at 214, just prior to the introduction of the new Act in 2004. The total amount of penalties imposed by WorkSafe Victoria over 10 years was just

under \$40M. Some 960 prosecution cases out of 1301 (74%) led to financial penalties being imposed.

A vast majority (some 98%) of the cases brought to prosecution involved physical injuries ranging from deaths through to amputations and lacerations. While there were some components of psychological trauma experienced by the workers they were almost invariably linked to serious physical injuries. Psychological trauma was also mentioned by the magistrates in their judgements in relation to family members of injured or deceased workers.

Table 5-2 History of prosecutions under the *OHS Act* in Victoria, and proportions of penalties relating to psychological health, 2001 to 2010

Year	Total prosecutions under <i>OHS Act</i>	Prosecutions with financial penalties/ convictions	Total fines issued ¹ (\$)	Prosecutions rel. to psych. health/ bullying	Fines rel. to psych health / bullying (\$)	% of total fine convictions
2001	120	109	4,740,500	0	0	0%
2002	133	117	2,891,200	1	8000	0.28%
2003	214	183	4,108,900	3	37500	0.91%
2004	173	116	3,182,800	2	60,000	1.89%
2005	137	88	2,400,919	1	0	0%
2006	103	69	2,338,500	3	0	0%
2007	106	62	2,813,300	0	0	0%
2008	109	65	4,799,000	2	10,000	0.21%
2009	115	72	6,946,750	4	0	0%
2010	91	79	5,313,500	6	340,000	6.40%
Total	1301	960	\$39,535,369	22	\$455,500	1.15%

Note: (1) Excluding costs imposed by the courts

As Table 5-2 shows, the number of prosecutions for the breaches of OHS law relating to psychosocial issues, including bullying, totalled 22 out of 1301, amounting to 1.7% of all cases. Penalties for breaches of the OHS Act specifically relating to failing to provide a work environment that was free from risks to employees' psychological health amounted to less than half a million dollars, corresponding to 1.15% of the total penalties.

It is significant to note that none of the reported prosecutions referred directly to work stress or risks of psychological health but all of them referred to workplace bullying. This one area of risk to psychological and physical health has been singled out and attempts to deal with it have been made. Even in the case of workplace bullying cases brought to courts by WorkSafe inspectors most of them had a physical component to the injuries. For example, in 2002, there was one case (out of 133 prosecutions for breaches of duty of care) described as follows:

When interviewed by WorkSafe investigators, a worker employed by the defendant alleged that he had been racially vilified, that sexual comments had been made about his fiancée and family, and that he had been assaulted on a number of occasions. The worker told investigators that he had been punched and burnt with cigarette butts. Mr Wosgien admitted to burning the worker with a cigarette and to burning his pants using an aerosol can.

Breaches of the *Occupational Health and Safety Act 1985*, sections, 21(1) and (2)(a) and, 21(1) and (2)(e) were found. The magistrate said the defendant was running a circus, not a business, and that his behaviour was disgraceful. He said any form of racial vilification or discrimination was unlawful and it was the duty of the employer to put a stop to any such conduct. (WorkSafe Victoria, 2002).

In this case there were references to physical injuries and physical assaults which was the case in most of the cases prosecuted by the WorkSafe. The most prominent case, attracting the highest overall penalty in this period, involved a waitress, Brodie Panlock who committed suicide, reportedly following repeated workplace bullying while working at a café in an eastern suburb of Melbourne. The total fines, amounting to \$325,000 for this one case, was brought against the organisation, the owner, manager and co-workers who were found to have caused risk to Brodie's health and safety. The behaviours, however, included physical assaults as well as psychological bullying.

The *Occupational Health and Safety Act 2004* also provides for enforceable undertakings as an enforcement option pursuant to section 16 of the Act. An enforceable undertaking is a legal agreement in which a person or organisation

undertakes to carry out specific activities to improve health and safety for workers and deliver benefits to industry and the broader community. These are typically provided to WorkSafe by the employer following a WorkSafe inspector issuing an improvement notice to the organisation. Since 2007, WorkSafe has accepted and published 15 enforceable undertakings. One of these related to a bullying case involving a local council worker, who reported being bullied, following him raising an issue relating to health and safety.

5.5.2 South Australia

SafeWork SA receives complaints of workplace bullying and conducts investigations of these matters in accordance with the provisions of the *Occupational Health, Safety and Welfare Act 1986 (SA)*. This Act was unique in the Australian OHS legislative landscape in that it included specific sections dealing with bullying and fatigue. Under this Act, SafeWork SA is able to prosecute an employer or an employee for a breach of the provisions of OHS legislation. Table 5-3 shows the number of total prosecutions with financial penalty convictions brought before the courts by the SafeWork SA during the period 2001–11 while the OHSW Act was still in operation.

As Table 5-3 shows there were 367 prosecutions for breaches to the OHS Act, leading to almost \$10M. In comparison with Victoria, there were about one-third of prosecutions in South Australia for a similar duty of care non-compliance (1301 compared with 367). The fines imposed were also significantly lower in South Australia, on average \$26,257 per case compared with \$41,183 in Victoria. There was a similar range of injuries for which prosecutions took place, including:

- amputations of digits;
- lacerations to fingers and other parts of the body;
- bone fractures;
- crush injuries;
- burns;
- fatal injuries;
- exposure to noxious chemicals or asbestos; and
- risks of physical injuries.

Table 5-3 History of prosecutions under the *OHS Act* in South Australia, and proportions of penalties relating to psychological health, 2001 to 2011

Year	Prosecutions with financial penalty convictions	Total fines (\$)¹	Prosecutions rel. to psych. health or bullying	Total Incidents rel. to psych health/ bullying	Fines rel. to psych health / bullying (\$)	% of total fine convictions
2001	2	33650	0	0	0	0%
2002	17	275475	0	0	0	0%
2003	23	621000	0	0	0	0%
2004	27	414300	0	0	0	0%
2005	29	574450	0	0	0	0%
2006	59	1521800	0	0	0	0%
2007	49	1242325	0	0	0	0%
2008	41	1104300	0	0	0	0%
2009	55	1284735	0	one mention²	0	0%
2010	36	1340625	0	0	0	0%
2011	29	1223700	0	0	0	0%
Total	367	9636360	0	0	0	0%

Notes: (1) Excluding costs imposed by the courts

(2) There was one incident with reference to psychological trauma associated with skull fracture after being struck on the head by a flying offcut of timber from a saw. The fine was issued for failure to adequately guard the saw to prevent objects from being ejected, and to prevent access to the saw blades and other moving parts of the plant

It is of significance to note that none of these prosecutions, fines or convictions was related to psychological health, work stress or even workplace bullying, despite the Act providing specifically for this psychosocial risk. There was only one reference to a psychological nature of injuries in conjunction with the physical ones in 2009 in a case brought against McDonnell Industries Pty Ltd, which was convicted and fined \$36,000 plus costs following an employee sustaining a serious skull fracture, and psychological trauma after being struck on the head by a flying offcut of timber from a saw. The psychological condition appears to be incidental to the physical injury, given its seriousness (see note 2, table 5-3 above).

In addition to the general provisions of duty of care of the Act, it allows agency inspectors to refer workplace bullying complaints to the Industrial Relations Commission of South Australia (IRC SA) for conciliation or mediation, where they have reason to believe that the matter is capable of resolution. Table 5-4 shows the

number of complaints received in relation to workplace bullying for which files were open, and the number which were referred to the IRC SA.

Table 5-4 Number of complaints for workplace bullying and files referred to industrial commission, 2006 to 2011

Year	Complaints received for workplace bullying and files opened	Files referred to IRC SA	Proportion of files referred to IRC SA	Case conferences	Prosecutions
2006	52	n/a	n/a	n/a	0
2007	97	1	1.0%	n/a	0
2008	131	21	16.0%	n/a	0
2009	125	19	15.2%	n/a	0
2010	138	5	3.6%	n/a	0
2011	165	9	5.5%	n/a	0
TOTAL	708	55	7.8%	35 (4.9%)	0

Sources: SafeWork SA (2012); House of Representatives Standing Committee on Education and Employment; Review into Bullying in the Workplace; SafeWork SA Submission.

SafeWork SA reported that 35 case conferences for bullying cases, which take place in order to establish whether the matter should be prepared for potential prosecutions, were held since 2006. There were no prohibition notices since 2006; however, 174 improvement notices have been issued in matters identified as having a workplace bullying component to them.

Clearly this regulatory agency has adopted a policy that all of the risks identified in the workplace in relation to bullying or any other psychosocial hazards will be dealt with through mediation and conciliation, whereas breaches of the Act in relation to physical hazards can be prosecuted. It believed that the role of the IRC is to provide “a low cost and effective service” and reported that the “mediation and conciliation is undertaken by experienced and qualified professionals who work with the parties to come to a mutually agreed resolution of the matter” (SafeWork SA, 2012). Clearly, workplace bullying and thus every other psychosocial risk was treated as an Industrial Relations matter, rather than an OHS issue, despite it being dealt with by the OHS Act, possibly due to this agency having the administrative responsibility under both frameworks.

In its submission to the Commonwealth's inquiry into workplace bullying, SafeWork SA made the following comments, revealing some of the difficulties that this sort of regulatory agency faces when dealing with psychosocial risks under the OHS framework:

SafeWork SA is currently undertaking a further review into how to best manage complaints of workplace bullying with a view to building on the experience of OHS and IR Inspectors, and ensuring that SafeWork SA is approaching the investigation of bullying complaints in the most effective manner. A key challenge in this process is the complexity of the issues. The Inspectors face the practical difficulties of filtering a myriad of individual personalities and behaviours, emotions and attitudes in order to determine a 'neat' solution to the problem that all parties are happy with. (SafeWork SA, 2012: 3).

In its experience as an agency that administers both the IR and OHS legislation, SafeWork SA considers that workplace bullying may be best handled by addressing the perceived 'gap' that currently exists between the management of IR and OHS matters and that a more holistic approach to bullying issues may be required.

The reason for this is that although bullying presents an OHS risk to the complainant's psychological health and safety, the assessment and investigation of the complaint requires a skill set that is quite different to those involved in addressing physical hazards.

Further to this, it can also be suggested that intrinsically, bullying is to some extent an IR issue with a focus on human resources and people management. As such, it may be more effectively dealt with by way of grievance procedures or formal processes that are more closely aligned with behaviour management practices rather than OHS.

Unlike physical hazards that are common to types of OHS complaints outside of bullying, the ability to recognise and respond to psychosocial

risks, such as bullying in the workplace can be a more complex and challenging process. In order to overcome the difficulties in assessing psychosocial risks, it is important for inspectors handling bullying complaints to have a good working knowledge of the factors that lead to, and increase the likelihood of such hazards arising in the workplace (SafeWork SA, 2012: 8).

These frank admissions reveal the difficulties faced by an agency responsible for administering the OHS Act in the area of psychosocial risks. The directions SafeWork SA is now pursuing include the development of the Code of Practice for workplace bullying to gain greater powers in the OHS realm as well as to fund research in this area through the Australian Workplace Barometer project, to determine the levels to which Australian workplaces experience work stress issues and how to best deal with them (Work Safe Australia, 2012).

5.6 Barriers to the adoption of OHS systems

The results of this study of regulatory perspectives of work stress prevention have highlighted some likely barriers to their implementation. Firstly, the lack of specific regulatory code and reliance on general duty of care, for managing psychological health to match the traditional OHS approach, has weakened the perception of the need to prioritise this area as a strategic risk management activity within organisations. Secondly, the absence of clear resources, guidelines and tools and thirdly, the lack of education that promotes awareness, knowledge and skills of those responsible for the enforcement of the current general OHS code applied to psychological health, have been identified as barriers. Government publications have been found to have confusing language with inadequate messages and no clear and comprehensive communication on how to deal with work stress (e.g. WorkSafe Victoria publication limited to public sector and community organisations, WorkSafe Victoria, 2007a). The messages have been found to be inconsistent (e.g. work stress and psychological hazards are interchangeably used and at times referred to as sources of stress and at other times as outcomes). The scope of the legislation has been found to be mostly narrow and, and in particular limited to

workplace bullying, seemingly without acknowledgment of bullying as one of the psychosocial hazards.

These findings are in line with the recent research into OHS inspectors' behaviours and their role in dealing with psychosocial risk factors. Psychosocial hazards were revealed "as a marginal area of inspectorate activity". While aware of psychosocial hazards, "inspectors often saw the issue as problematic due to limited training, resourcing constraints, deficiencies in regulation and fears of victimisation amongst workers". Some of the changes proposed as a result of this research were:

revisions to regulation (both general duty provisions and specific codes), the development of comprehensive guidance and assessment tools to be used by inspectors, greater use of procedural enforcement, and enhanced inspectorate resourcing and training. There is also a need to recognize complex inter-linkages between psychosocial hazards and the industrial relations context (Johnstone *et al.*, 2011: 547).

Similarly, recent studies of the barriers to the uptake of PsHS systems in Europe identified "lack of clarity and specificity on the terminology used and that might result in confusion" and that "although the different standards are based on related paradigms, very much rooted in the philosophy of OSH legislation, very few of them provide specific guidance on psychosocial risk management to enable organisations (and especially small and medium-sized enterprises (SMEs)) to manage psychosocial risks successfully and in a preventive manner" (Leka *et al.*, 2011a: 1054). The European experience that has only recently been evaluated with greater rigour has been that legal developments have not had the impact anticipated by experts and policy makers at the practice level (Ertel *et al.*, 2010; Iavicoli *et al.*, 2010; Leka & Cox, 2010). The main reason cited for this has been the gap that exists between policy and practice. Among the reasons for this gap is "lack of awareness across the enlarged EU that is often associated with lack of expertise, research and appropriate infrastructure" (Leka *et al.*, 2010: 298). A recent review of the extent to which psychosocial risk management frameworks are adopted in Europe concluded that it is related to fear and associated resistance to taking necessary action, with the ultimate decision as to whether to adopt it or not coming

down to the degree each stakeholder is willing to take a risk about their organisation, or individual job. Three potential barriers were explored: (1) Lack of clear definition and understanding of psychosocial risks, (2) the case for prioritisation of managing psychological risks is not clearly defined, and (3) psychosocial risk management tools and methods are not suitable for businesses, (Leka, *et al.*, 2015).

The lack of adequate knowledge and skills and complexity of health issues of a psychological nature have been highlighted by a submission of one of the state regulatory bodies to the Commonwealth Inquiry on Bullying as a key barrier for their lack of rigour in responding for assistance and pursuing organisations through the judicial system (SafeWork SA, 2012). There was a similar conclusion drawn about the lack of skills of safety inspectors in this area by the European inspections of psychosocial risks. Out of 27 participating countries only four reported that more than 75% of their inspectors were competent in psychosocial risk assessment and 15 countries reported that only 25% or less were competent. This factor was identified as one of the reasons for a great variance amongst different countries in their compliance with such assessments, (SLIC, 2012).

5.7 Summary

Most OHS regulators in developed countries have included the responsibility for providing a work environment that is free of risk to psychological health, either implicitly or explicitly, in respective OHS legislations. By doing so, they imposed the requirement to treat the risk of psychological and physical injuries using the same instruments.

At the same time, apart from providing general guidance materials for employers, there have been no specific regulations or codes of practice issued for this complex area of management responsibility. All of the jurisdictions have relied on general provisions of duty of care of respective OHS laws to ensure compliance.

Workplace bullying has been singled out as the most prominent psychosocial hazard for which there have been specific guidance notes issued and, in the case of South Australia, specific provisions created within OHS law. A study of prosecutions and

penalties issued by regulators in South Australia and Victoria revealed that agencies responsible for administering these laws do not treat physical and psychological risks in the same way, as shown by a very small percentage of prosecutions relating to psychosocial risks. In each case, where such prosecutions took place, in Victoria they were related to workplace bullying and most involved a physical injury or assault component. The South Australian experience was that such psychosocial risks have been intentionally treated more like Industrial Relations disputes or Human Resource conflicts to be resolved rather than a breach of OHS laws. There have been no prosecutions in South Australia relating to psychosocial risks in the last 10 years.

Some of the conclusions and significant issues faced by regulators include the need for providing clear and consistent messages for employers about how to discharge one's responsibilities for managing psychosocial risks and skill development of the inspectors who administer the OHS Act. Their skills need to encompass dealing with psychosocial issues perceived as 'invisible', complex and couched, in terms of interpersonal human relations conflict, rather than an OHS issue.

6 Study 3: Incidence of systemic prevention programs – organisational perspective

6.1 Introduction

The previous chapter presented the research findings concluding that most of the jurisdictions in Australia adopted the OHS regulatory framework to managing work stress. Despite this consistent approach, evidence was presented that agencies rarely applied the same rigour to breaches of the regulations in relation to psychological health, compared to physical injuries. In earlier chapters, (chapter 2.8 and 4.6) through the literature reviews, it was established that the most effective ways to prevent and manage work stress is through a systemic approach involving both organisational and individual elements. The barriers to employers adopting a systemic approach were identified from a regulatory perspective.

This chapter presents research data collected from a series of interviews and surveys designed to determine the extent to which employers manage work stress through a systemic OHS approach. As previously mentioned there are few research studies involving systemic organisational intervention programs, and therefore they are not being implemented. Study 3 determines whether this is actually the case or whether such programs are indeed not being studied or reported.

Prior to presenting this study here, the elements of a system generally recommended for managing a generic OHS function will be identified. The PsHS approach, introduced earlier, compared and contrasted with a traditional OHS system, will then be described in detail. Further barriers to the adoption of a systemic approach to managing safety in the workplace are identified from the employer's perspective on the basis of data from interviews and the survey.

6.2 Management of PsHS as a system

The concept of risk management being used for managing work stress was introduced earlier in Chapters 2 and 4 (Sections 2.8.3 and 4.4.2). Its application as a systemic approach to work stress prevention within an OHS System has been

referred to as Psychosocial Health and Safety (PsHS). It was established that there has been little agreement about systemic work stress prevention to enable its uptake amongst organisations, so prevention can be robustly tested. This section provides a more detailed description of the systemic elements used as a basis for the development of survey instruments. Since the management of generic health and safety at work has used a systems approach for decades, it is useful to study its development, implementation and structure here. Some findings and conclusions from this more extensive investigation can then be applied to more recent parallel initiatives in the management of psychological health.

The PsHS is underpinned by the assumption that psychological injury in the workplace can be managed using the same risk management approach as physical injuries within the overall OHS management system (OHSMS). A much longer history of physical injury prevention through the use of these systemic approaches is evident, but its application to the psychosocial realm is relatively new. Hence it is useful to consider the principles, processes and experiences relating to the adoption of traditional OHSMS and Risk Management in the workplace, and particularly barriers to its adoption.

6.2.1 Systemic elements of an OHS management system

There has been a greater focus on approaching the management of OHS through a systems approach since the late 1980s following a century of development (Frick & Wren, 2000). Since then, the components of an effective system have been agreed on and documented in international standards or guidelines against which their implementation has been tested. A common approach to OHS standards is that they concentrate on *how* OHS is to be addressed by providing systematic structures (committees, functions and roles responsible for certain activities) and processes (activities), rather than specifying *what* hazards are to be addressed or the particular control measures to be implemented (Frick & Wren, 2000: 23).

Historically, OHS professionals were calling for the development of international standards from the early 1990s, involving the International Standardisation Organisation (ISO). Since this has proved unsuccessful, development of guidelines

and standards were undertaken through either national or jurisdictional efforts. One of the examples of a national standard is the Australian and New Zealand standard, AS/NZS 4801:2001 (Standards Australia, 2001). An example of local jurisdictional standard, developed by WorkSafe Victoria, is SafetyMAP.

The core elements of an OHS management system, drawing on the Australian standards and international guidelines have been identified as follows (adapted from Standards Australia, 2001 and Bluff, 2003):

- **Integration** into the organisation's other management systems.
- **Management commitment** to OHS management.
- **Organising, planning and resourcing** including objectives, strategies, plans, and human and financial resources.
- **Responsibility and accountability** identified and allocated to individuals within the organisation, so that accountability mechanisms are established.
- **OHS expertise** – either internal or available externally.
- **Policy and procedures** for key OHS processes including specific types of hazardous work, first aid, treatment and emergency response.
- **Risk management** – systematic identification of hazards, assessment and control of risks, and monitoring of the effectiveness of its implementation.
- **Participation** of workers in OHS.
- **OHS instruction and training** for managers, supervisors and workers.
- **Monitoring, reporting, investigating and correcting deficiencies** of OHS problems and incidents.
- **Auditing, review and performance monitoring** of OHS management aspects including establishing performance measures and ongoing monitoring of performance against these indicators.
- **Documentation** of structures, planning activities, responsibilities, processes and procedures, resources and actions taken to develop, implement, evaluate and review OHS management.

The element that is considered central to the OHS system is effective risk management: the systematic identification of hazards, assessment and control of

risks, evaluation and review of risk control measures to ensure that they are effectively implemented and maintained.

Effective risk management requires that responsibility is designated, that those involved are competent and resourced to determine and implement the required preventive measures, that workers are actively involved, and that procedures are documented and repeatable (Bluff, 2003: 1).

The risk management framework has been standardised in Australia by its national standard body, Standards Australia (2009).

The extent of sophistication to which OHS management systems have been implemented in workplaces has been the subject of debate amongst researchers. These systems have been tracked, from the early focus on technical aspects and high risk industries, to a more contemporary emphasis on organisational and management aspects (Frick & Wren, 2000). The following framework for tracking four stages of maturity of OHS system development within organisations was proposed by Zwetsloot (2000: 392-393):

- Ad hoc stage – where the organisation has little OHSM expertise and reacts to problems or incidents as they arise.
- Systematic stage – where the organisation conducts regular risk assessments, action planning, prioritising of problems and implementation of planned control measures. During this stage several people in the organisation are developing relevant skills internally using external OHS expertise.
- System stage – where the organisation implements and maintains an OHS management system by continuous structural attention to OHS, which is organised before the start of new activities. Procedures and accountabilities are clear, the focus is on prevention and control: periodic auditing and management review of the OHSM system.
- Proactive stage – where the organisation integrates OHS into other management systems, such as those for quality and environment, and/or integrates OHSM into its business processes; the focus is on continuous improvement and initiatives for improvement are expected from everyone;

direct participation is important in order to have short and proactive feedback loops; more effort is directed at the design stage of products, processes, workplaces and work organisation, and associated technological and organisational choices; collective learning is fostered; and OHS management is seen as contributing to a positive company image by the labour market and customers.

This developmental model is also likely to apply to Psychological Health and Safety. It is expected that since there is little evidence of organisations implementing systemic aspects of work stress prevention, more organisations are still at the ad hoc stage of development. This progression and current state of PsHS system maturity also has implications for regulators, so that guidelines reflect this state of development rather than assume a more proactive approach, creating a mismatch in language and expectations.

6.2.2 Elements of the PsHS system

While the literature dealing with work stress prevention refers to systems or comprehensive approaches, it rarely specifies the conditions that such an approach needs to meet for it to be considered 'systemic'. A systems approach to organisational work stress intervention was initially classified as such if it included a risk management aspect, that is, hazard identification, and assessment of risk and planning (Cox & Griffiths, 1995). Kompier *et al.* (1998) stipulated five elements essential to successful organisational work stress intervention as follows:

- a 'stepwise' and systematic risk management approach;
- a thorough risk analysis: job redesign should not be undertaken without first undertaking adequate 'diagnosis';
- 'a combination of work-directed and worker-directed measures': measures to address risk at source (i.e. in the work environment) were supported by secondary measures to improve the coping capacity of workers;
- a participative approach, in which employees and middle managers were considered 'the experts' with respect to their own working situation; and
- sustained commitment by senior management, so that active management of psychosocial working conditions at all levels becomes a 'normal' company practice.

The elements which have been consistently identified by subsequent researchers and reflected a standard Health and Safety management system (Biron *et al.*, 2006; Jordan *et al.*, 2003; LaMontagne *et al.*, 2006) included:

- **risk assessment methodology** including systematic hazard identification, risk assessment and control planning, implementation and reviews of its effectiveness;
- **top management commitment** to the strategy development and PsHS implementation;
- **a participative approach** – consultation with employees in the process of undertaking risk assessment as well as throughout the process of PsHS development and management;
- **evaluation and review** of effectiveness of the stress prevention strategy; and
- **a strategic approach** to stress prevention.

These elements, combined with the OHS standards, were taken into account when developing the survey tool designed to determine the extent to which organisations have adopted a systemic approach to psychological injury prevention in Australia and to reveal the level of their system maturity.

6.2.3 Risk assessment in PsHS

Since the most common and significant hallmark of a systemic approach involves risk assessment methodology, its application to psychological health and safety needs to be fully understood. In a systemic approach, the hazards with the potential for injury or harm are treated in the same way as in physical injuries, that is, they need to be identified, their risks assessed and then controlled. This approach is consistent with the proposed model presented in figure 6-1 below, adapted from Cox *et al.*, 2000. It outlines two paths of potential physical and psychological harm: (1) direct path, stemming from physical environment hazards, and (2) indirect path, resulting from psychosocial hazards. In this model, both physical and psychosocial aspects of work are considered as potential hazards. It also assumes a known list of hazards that can be used as a checklist, similar to a physical workplace hazard audit.

While the indirect path includes the individual experience of stress, only the organisational hazards are taken into account in the risk management process. This is a significant aspect of the process, as it requires those undertaking such risk assessment to be fully aware of the organisational focus and to be skilled in the process. The physical hazard audits are often carried out by OHS committee members without requiring specific qualifications relating to the nature of the hazards being identified; it is therefore likely that anyone undertaking this process in the psychosocial sphere would use their own conceptualisation of the causes of work stress without any targeted training. The assessment of psychosocial risk sphere involves more subjectivity and a more complex process, particularly involving employee consultation and participation.

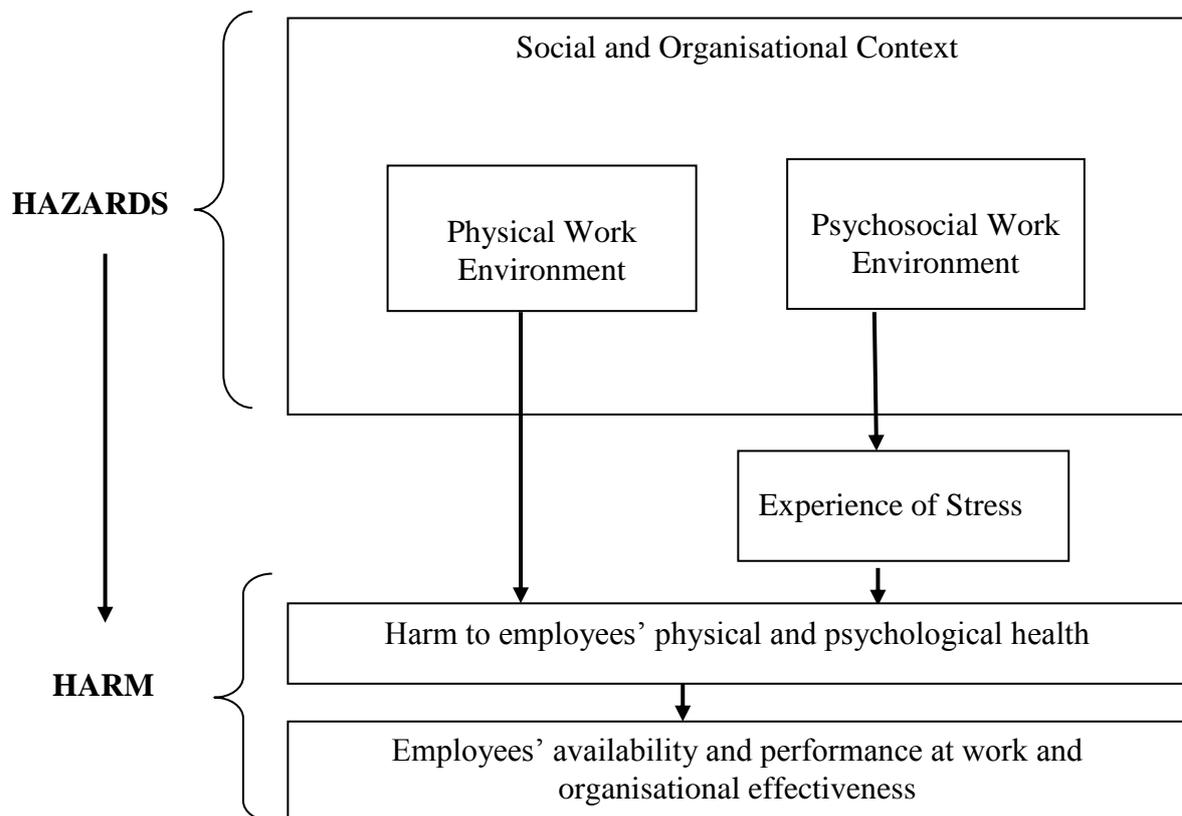


Figure 6-1 Risk Management model
(adapted from Cox *et al.*, 2000)

The best practice psychosocial risk assessment model has been described more recently as consisting of the following four stages (Leka & Cox, 2010):

- **Risk assessment** – comprising the elements of identification of psychosocial hazards that are both situation-specific and job-specific, and information about possible harm.
- **Translation** – this part of the process involves the discussion, prioritisation and targeting actions of the identified risk factors.
- **Intervention and risk reduction** – involving planning and implementing change processes targeting the highest risk factors.
- **Evaluation** – leading to a continuous improvement of the process and implementation.

Risk assessment activity implies both processes of identifying hazards and the assessment of potential harm (i.e. level risk to people and organisations if the hazards are not controlled or managed in some way to reduce that risk). A risk is typically expressed as a product of the consequence, probability of a specific (negative consequence) event and exposure to hazards (Waring, 1996). While there are sophisticated methods for analysing risks in the physical realm, there have been calls by some industry advisors and researchers to ensure that approaches in their psychosocial application remain pragmatic and simple (Griffiths *et al.*, 1996). For example, using case assessments is preferred to a rigorous research methodology, subject to these being based on adequate theoretical framework and reliable measures. In practical work contexts, valid data is often not readily available and time expended on elaborate and accurate numerical assessments of risk is not considered cost-efficient. There appears to be a disconnect between some researchers favouring epidemiological research design risk assessment methodologies and the reality of the organisational workplace, demanding returns on prevention investment.

The concept of ‘translation’ as a step in risk assessment methodology proposed by Cox *et al.* (2000) is a significant variation from the physical OHS approach. This process encompasses the identification of ‘underlying pathologies’ relating to the emotional reactions of those involved in the assessment and dealing with the political ramifications of risk control planning stage. This practical approach also calls for a minimum number of risk control action items to affect a maximum number of risk factors.

Three constructs of risk were proposed by Jensen (2002:211) which could be helpful, particularly in their application to PsHS management and they include:

- an expert-based understanding of risk where risk is conceptualised as the product of the probability of an adverse event occurring and the consequences of this event;
- a legal understanding of risk which is typically established through a formal or political process; and
- a local understanding of risk involving a shared understanding developed between the people engaged in risk assessment.

The last construct (local understanding) has ready appeal for the purpose of establishing the agreed level of risk for a particular workplace. The perception of risk is likely to play a bigger part in the PsHS, especially in light of evidence that employers' perception of risk may vary from employees' perceptions in a blue collar environment. For example, employers gave a higher rating to risks with an immediate injury effect (emphasising likelihood) whereas employees gave a higher rating to risks with a delayed disease effect (emphasising consequence) (Holmes *et al.*, 1997). Expert-based quantitative assessments of risk also involve assumptions that require subjective decisions about information sources used to assess risk and their interpretation (Toft, 1996). Since OHS risk assessments face challenges of subjectivity and risk perceptions, they are even more likely to be a challenge in PsHS management, requiring greater skill capability in this area.

6.2.4 Participation in risk assessment

One of the elements common to both OHS and PsHS risk management is the inherent requirement that workers will be involved in this process. Employee consultation during every phase of the risk management process (hazard identification, risk assessment, risk control planning and action plan implementation) has become the cornerstone of every OHS legislation in Australia and most other model OHS Acts. The participation of workers takes a greater significance in the PsHS approaches due to the very nature of work stress being defined as the experience and interaction between the individual and their work environment.

Also, foundational stress theories identified the level of worker control over their jobs as being one of the key determinants of work stress (Karasek & Theorell, 1990). The participative approach also reflects devolution of control to workers over decision making – a central tenet of the Job Demand-Control work stress theory of improving worker wellbeing (Dollard & Metzger, 1999).

Participation of employees in psychosocial risk assessment as a “concrete enactment of job control, organisational fairness and justice, and mutual support was proposed to have the following positive outcomes for employers and employees” (LaMontagne *et al.*, 2012) including:

- greater accuracy in problem identification and analysis;
- improved communication in all aspects of the interventions;
- heightened responsibility for the problems identified; and
- enhanced capacity building and organisational learning.

The current experience of risk management intervention is, however, that employees are more likely to be passive recipients of the ‘top down’ approach to interventions (Nielsen, Taris & Cox, 2010). This experience is not limited to psychosocial risk management as various worker participation or involvement strategies have been found to be ‘more ceremonial than substantive’ (LaMontagne *et al.*, 2012: 28).

6.3 Methodology for this Study

The methodology underpinning Study 3 (presented in this Chapter 6) is a survey of organisational representatives (HR or OHS managers). This methodology was introduced in Chapter 3, Section 3.9.3. The sections below (6.3.1 – 6.3.3) provide a more detailed outline of survey design and implementation.

6.3.1 Survey design

Based on research of OHS management system standards and their application to the PsHS framework the following elements were included in the survey to establish the incidence of a systematic approach to PsHS including:

- documented policy and strategy;

- documented commitment from the Executive;
- documented process for stress intervention;
- consultation with employees;
- risk assessment;
- collection and analysis of data;
- integration with OHS system; and
- documented review and evaluation.

Each element was explored in more detail to probe the level of development and application of these elements within each organisation. The respondents' roles (Human Resources, OHS Management, Risk Management, Injury Management, Organisational Development and Organisational Wellbeing), and their responsibilities (executive manager, team leader, advisor) were also collected. The demographics of organisations represented by the survey respondents included:

- organisational type (government, private, not-for-profit);
- industry classification;
- size – number of employees; and
- geographical scope of the organisation – states within which they operate.

The survey commenced with seeking the respondents' views about the overall approach of their organisation to stress prevention and then moved on to exploring each systemic element and the extent to which it was implemented. It concluded (with the questions about the participants' views) questions about the best approaches to preventing and managing work stress and their beliefs about the barriers to implementing systemic programs.

A copy of the complete survey tool used in this study is presented in Appendix C.

6.3.2 Interviews with HR managers

As part of the survey development process and its pilot phase, six HR managers were interviewed on a one-to-one and face-to-face basis by the author, using the survey tool as the structure for interviews. The application of the survey items to

their organisations was explored to ensure questions realistically probed the level of their system development. Written records of interviews were kept and analysed.

The interviews also provided an opportunity to explore in-depth the approach of each organisation to stress prevention, including their experiences with the process and beliefs about their effectiveness. At the end of the interviews, HR managers were also asked questions about their beliefs in relation to work stress that were developed for the managers' survey (described in more detail in Chapter 7). Their answers provided additional insight into the conceptualisation of work stress as well as acting as a pilot for the HR managers' survey.

6.3.3 Sample considerations

The population of interest for the purpose of the organisational survey was limited to organisations operating in Victoria, with a particular emphasis on government and human services for two reasons: firstly, because the Victorian OHS legislation explicitly required employers to prevent risks to psychological health and secondly, because the agency responsible for administering this legislation, WorkSafe Victoria issued specific guidelines for the management and prevention of work stress for government and human service organisations.

The list of 860 organisations was drawn from a database, including all state and local government enterprises within Victoria plus a number of other organisations, with the following industry demographic profile, as shown in table 6-1:

Table 6-1 Sample population sizes by type of organisation

Organisational type	Number in sample
Commonwealth government	54
State government	121
Local government	42
Not-for-profit	82
Private	561
TOTAL	860

An invitation was issued by email to HR and/or OHS practitioners in each organisation to participate in the survey, including the reference to Victoria University's Human Research Ethics Committee's approval and relevant contact details. As the response rate was low, there were a number of follow-up telephone calls made throughout 2012–13 to encourage their participation.

The survey response rate was very small (around 4%), with 34 participants at the point when the survey was analysed. The targeted recipients were offered a free report with the survey results, if they provided their contact details. While the most likely reason for the low response rate was the busy schedule of the targeted population, it also points to the low priority in general placed by HR/ OHS managers on gaining new insights into this area of their responsibility. This is a recognised limitation in the research which will be discussed in more detail in Chapter 9 (Section 9.6). Despite its low response rate, it is considered a useful contribution to the entire research given that it constitutes one part of the five lines of enquiry. Further, the sample represented a broad range of industries and organisational sizes.

Interviews with HR managers were conducted between March 2011 and April 2012. The organisational survey was conducted between May 2012 and April 2013.

6.4 Interview results

6.4.1 Demographics of interviewed organisations

The six organisations represented in the interviews had the following profiles:

- two local government councils;
- one not-for-profit organisation; and
- three state government organisations.

Three of the interviewed organisations were involved in human services or health care provision.

Five of the interviewees had HR management roles and one was an OHS manager. One of the HR managers was not able to answer all of the questions relating to the organisation's approaches to prevention and management of work stress, and instead referred the questions to the OHS manager who supplemented the answers and completed the interview. All of the interviewees were senior and experienced HR practitioners who participated or led many work stress prevention initiatives in their various current and past roles.

The size of the six organisations ranged from 700 to 11,000, with an average of 3520 and a median of 1750.

6.4.2 Interview findings

All interviewees reported that their respective organisations engage in some stress prevention activities but on an ad hoc or case-by-case basis. Three of them who reported having some programs involving risk management, including risk assessment and consultation with employees, did so only on an individual workplace basis and they were driven by a recognised problem or need such as a high level of unplanned absence or workplace conflict. None of them conducted systematic psychosocial risk management programs at the enterprise level. One organisation had a well-developed policy, strategy and process for work stress risk management; however, there was no enforcing or monitoring of its implementation at the workplace level. There was only a handful (3 to 5) of workplaces involving the combined cohort of 100 employees, where there was evidence of the implementation of this process within the two-year period, out of over 10,000 employees.

While all of the organisations reported having a system for managing OHS, including clear strategies and policies, none of them had psychological health integrated within this system. None of them had a specific budget allocated to work stress prevention, but most identified a small amount of the health promotion budget, which encompassed mental health. They recognised that this activity had a work stress preventive component although it was not formally categorised as such.

Another most commonly reported initiative categorised as having a work stress prevention purpose was an Employee Assistance Program including a Critical Incident Response process.

When asked about the barriers their organisations faced in adopting a systematic and integrated work stress prevention approach, they identified the following:

- Complexity of both the organisational context and psychosocial issues within the workplace:

‘It’s all wrapped up in the complexity of mental health issues’

- Lack of skills and confidence in this area, partly linked to its perceived complexity
- Lack of knowledge – both about work stress, the prevention process, psychosocial risk management as well as its interaction with leadership and people management:

‘The biggest problem is that executives cause most of the stress and are unaware how their leadership style impacts on the whole organisation’

- Insufficient time available – on managers’ agenda and for employees to be involved in risk assessments and consultation, particularly in the rostered environments:

‘Systematic psychosocial risk management is not practical in rostered settings’

- Belief that psychosocial risk management process does not produce long-term, results:

‘In a stress assessment, everyone purges and vents issues of concern but it does not lead to long term action’

- Fear of admitting that work stress is an issue – for employees because of the potential negative consequences on their careers and for managers because they would then be accountable for managing it.

6.5 Survey results

6.5.1 Surveyed organisations' demographics

There were 34 responses to the organisational survey and their demographic profile is described below in table 6-2. The majority of survey respondents were in Human Resource roles, followed by OHS management. A number of respondents fulfilled multiple roles.

Table 6-2 Sample organisational role demographics

Role of the respondent	Response %	Response count
Human Resources	78.8%	26
OHS/ OHSE	12.1%	4
Injury Management	3.0%	1
Risk Management	0.0%	0
Organisational Development	12.1%	4
Wellbeing	9.1%	3
Other	9.1%	3
	<i>answered question</i>	33
	<i>missing data</i>	1

Most of the respondents (70%) had a management or supervisory responsibility and others were in a co-ordinator/ advisor position.

As table 6-3 shows below, government sector organisations were most represented in the sample, with over 58%, about 30% were from the private sector and about 12% from not-for-profit organisations.

Table 6-3 Sample organisational type demographics

Organisation type	Response %	Response count
Government	58.8%	20
Private	29.4%	10
Not-for-profit	11.8%	4
	<i>answered question</i>	34
	<i>missing data</i>	0

There was a broad range of industry profiles represented in the response sample, as shown in table 6-4 below.

Table 6-4 Sample industry type demographics

Industry type	Response %	Response count
Other	5.9%	2
Agriculture, Forestry and Fishing	2.9%	1
Professional, Scientific and Technical Services	17.6%	6
Health and Community services	11.8%	4
Education and Training	14.7%	5
Public Administration and Safety	5.9%	2
Administration and Support Services	5.9%	2
Finance and Insurance	8.8%	3
Property and Business services	0.0%	0
Information, Media and Telecommunication services	8.8%	3
Arts and Recreation Services	2.9%	1
Retail/ Wholesale Trade	0.0%	0
Manufacturing	8.8%	3
Hospitality, Accommodation and Food services	0.0%	0
Mining	0.0%	0
Construction	2.9%	1
Electricity, Gas, Water and Waste Services	0.0%	0
Transport and Storage	2.9%	1
<i>answered question</i>		34
<i>missing data</i>		0

The majority of organisations (over 97%) represented in the sample operated in Victoria, and a number also operated in other states.

Table 6-5 Sample state demographics

State the organisation operates in	Response %	Response count
Vic	97.1%	33
NSW	23.5%	8
Qld	17.6%	6
SA	14.7%	5
WA	14.7%	5
NT	2.9%	1
ACT	11.8%	4
Tas	11.8%	4
<i>answered question</i>		34
<i>missing data</i>		0

Only one organisation in the response sample was smaller than 100 employees and the majority was in the range of 500 to 5000. The largest had 20,000 employees. The average size of the responding organisation was 2600 employees, and the median was 975.

Table 6-6 Sample organisation size demographics

Size of organisation (no. employees)	Response %	Response count
Less than 100	2.9%	1
101 - 500	20.6%	7
501 - 1000	29.4%	10
1001 - 5000	35.3%	12
More than 5000	11.8%	4
Total	100.0%	34

6.5.2 Overall findings of incidence of systemic prevention

The survey responses to the direct question about how the organisation manages work stress have confirmed that overall, only a small proportion (less than 10%) of organisations does it systematically. The majority of responses were 'ad hoc' (almost 70%) and, when combining the responses of 'rarely' and 'ad hoc', this proportion increases to 84%. Those that either did not know or responded that their organisation does not manage this area at all was 6% (see figure 6-2 below).

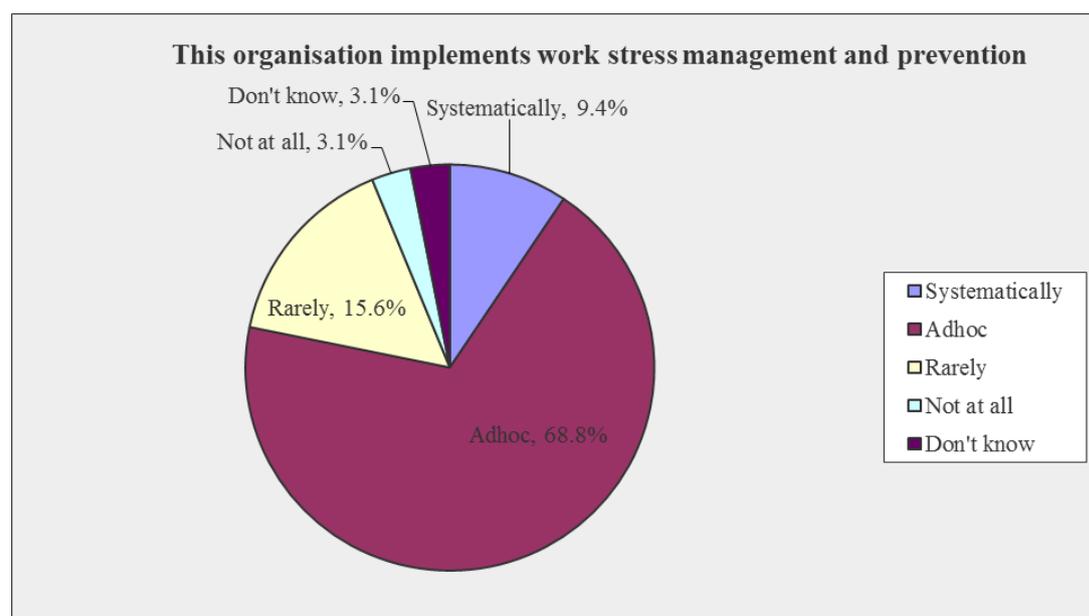


Figure 6-2 Proportions of responses to how systematically organisations implement work stress prevention

Further analysis of the systematic approach organisations (i.e. those respondents who answered 'systematically' to the question in the above chart) providing more in-depth responses about the various systemic elements revealed the following about their prevention activities:

- When reporting on conducting risk assessments as part of their prevention program: 33% conducted none and others conducted them randomly through spot checks or in an ad hoc manner.
- When asked about the existence of a documented commitment from the Executive in the stress prevention policy / strategy: 33% answered it existed, and others reported it did not exist or they did not know.
- When reporting on the types of activities undertaken as part of their prevention program, the answers focused on the provision of training (stress management, awareness and resilience to both employees and managers), training to improve communication and Employee Assistance Programs/ Critical Incident Response.
- When asked about whether their system is evaluated, only 33% answered that it was evaluated, but not to a quantifiable benchmark, and others did not report any evaluation taking place.
- All of these organisations reported either small or non-existent budgets targeted the area of work stress.
- All of these respondents agreed or strongly agreed with the statement that their organisational policy/ strategy are effective.

This more precise analysis of the responses casts further doubt as to whether even 10% of surveyed organisations meet the criteria of adopting systemic approaches which include at least: psychosocial risk assessments, consultation with employees, documentation of strategy and evaluation. It also indicates that respondents in the roles of HR managers and OHS managers may not be fully aware of what constitutes a systemic approach to managing work stress.

Sixty percent of respondents reported that their organisations had conducted some work stress prevention/ intervention programs in the previous two years. The types of activities that organisations reported (in a free text response survey item), as

falling within this area and their frequency are listed in table 6-7 below. Each of the activity types was then coded with respect to its organisational or individual focus and the level of prevention (primary, secondary, tertiary).

Table 6-7 Work stress prevention activities reported

Activity	Frequency of mentions	Individual/organisation	Primary (1) Secondary (2) Tertiary (3)
Awareness – stress/ mental health promotion	25%	I	1
EAP	20%	I	2
Health promotion/ wellbeing program	15%	I	1
Strategy/ policy/ procedure/ measurement	15%	O	1
Training – general	15%	O	1
Presentation to Exec/ management	10%	O	1
Health assessments	10%	I	1
Training – resilience	10%	I	1
Climate/ culture surveys	10%	O	1
Psychosocial risk assessment	10%	O	1
Targeted individual intervention/ support	5%	I	3
Conflict resolution resource	5%	I	2
Training – communication	5%	I	1
Environmental improvements	5%	O	1
Social gatherings	5%	O	1
Reward and recognition	5%	O	1
Work practices/ workload review	5%	O	1

The most frequently applied prevention activities appear to be individually focused – namely training/ awareness / health promotion categories and Employee Assistance Programs. While training and awareness activities are truly designed as mental / psychological health promotion programs, they can also be classified as primary prevention; however EAPs fall within the secondary and reactive category. There were some less frequently reported organisational focused activities relating to work design, strategy, measurement and people management improvements.

When the participants were asked to respond to specific categories of the activities which took place within their organisations in the last one to two years, their responses revealed a similar focus on training, however communication skills were the most often reported training focus (62%) and stress awareness for managers was the next most often reported activity (50%) followed by organisational changes (46%) and resilience training for employees (39%), as shown in table 6-8 below.

Table 6-8 Planned work stress activities reported

Which of the following have taken place in the last one to two years in this organisation, as a planned stress prevention activity (please tick as many as apply)		
Answer options	Response %	Response count
Organisational changes (e.g. policy/ process change)	46.2%	12
Recruitment/ selection changes	26.9%	7
Physical environment changes	34.6%	9
Stress management/ resilience training for employees	38.5%	10
Stress awareness/ mental health training for managers	50.0%	13
Activities to improve communication	61.5%	16
Other (please specify)		7
	<i>answered question</i>	26
	<i>missing data</i>	8

A number of respondents qualified their response by stating that while the reported activities took place within their organisation, they were not part of a ‘planned stress prevention activity’ or they did not take place within the last, two years. These comments reinforced the sense that management of this area of management responsibility takes place on an ad hoc basis rather than as a strategic or systemic activity.

The survey probed, more specifically, the level of implementation of specific components of a PsHS management system, namely:

- risk assessment;
- strategy documentation;
- top management commitment;
- employee participation and awareness;
- integration with OHS system; and
- evaluation and review.

The level to which each of the above elements is present in the systems as reported by the surveyed organisations is shown in the graph below.

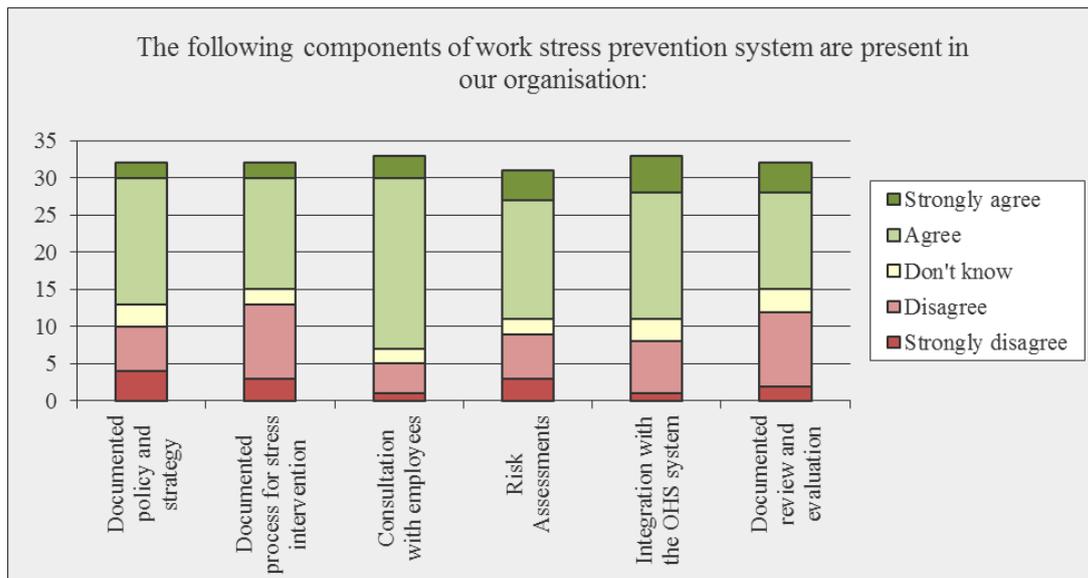


Figure 6-3 Presence of work stress prevention system components in organisations

The agreement or strong agreement was reported with the system elements as follows, in the order of their strongest presence:

- consultation with employees (79%);
- integration with the OHS system (67%);
- risk assessments (61%)
- documented policy and strategy (58%)
- documented process for stress intervention (52%)
- documented review and evaluation (52%)

A summary of the responses to more in-depth questions relating to each of the above elements and their analysis is presented in the following sections. In contrast, however, as shown in Figure 6-4, the question relating to general OHS relating to physical health generated quite different responses relating to the presence of documented policy (97% agreed), documented commitment from the Executive (97% agreed) and regular workplace audits (94% agreed). Thus, while over 90 percent of respondents agreed or strongly agreed that these essential components were present in the physical OHS system, only 58 percent of the participants reported that they existed in relation to managing work stress, or psychological health.

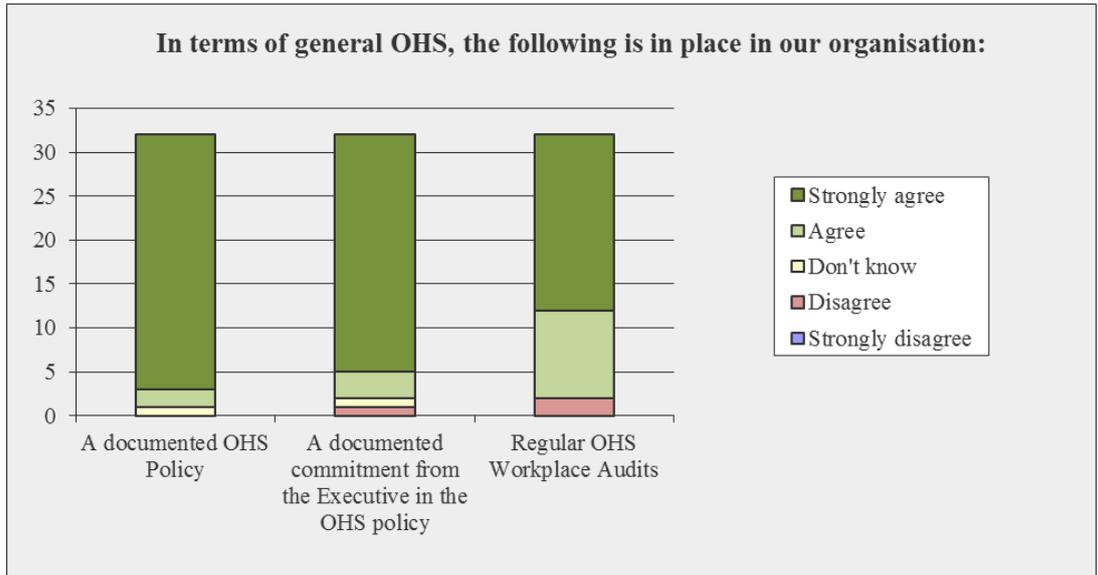


Figure 6-4 Presence of work stress prevention system components in organisations

6.5.3 Risk assessment

In response to a specific question as to whether the organisation has ever conducted a work stress risk assessment, 58% responded they did not and 21% said they did not know. The answer to this question was in contrast to the answers given to the previous general question, where 61% agreed that their approaches to work stress management include risk assessments. Only 21% of respondents reported that their organisations had conducted a risk assessment within the last two years, as shown in table 6-9 below.

Table 6-9 Proportions of organisations conducting work stress risk assessments

Has this organisation ever conducted a work stress risk assessment?		
Answer options	Response %	Response count
Yes, within last year	9.1%	3
Yes, within last 1-2 years	12.1%	4
Yes, longer than 2 years ago	0.0%	0
No	57.6%	19
Don't know	21.2%	7
<i>answered question</i>		33
<i>missing data</i>		1

In contrast, 94% of the same organisations reported that their OHS workplace physical hazard audits take place regularly and systematically. There is therefore a discrepancy between the reports of a high percentage of the respondents (67%) agreeing that their work stress systems are integrated with the OHS system and the above result. Of those who reported they had conducted a work stress risk assessment within the last two years the following additional information is available:

- 70% reported performing such assessments in an ad hoc manner and 20% as ‘random/ spot checks’;
- 25% reported conducting such assessments throughout the entire organisation, while most others did so in selected departments or teams;
- 44% utilised a questionnaire for such an assessment;
- 78% reported employing a focus group and 22% interviews for the purpose of such an assessment;
- 80% reported that their assessments identified sources of psychosocial hazards; and
- 70% included some data analysis in their risk assessment, with the following types of data used in the order of the most often reported:

Unplanned absences	60%
Compensation claims	50%
OHS incidents	50%
Staff turnover	40%
Lost time injuries	30%
Exit interviews	30%

A number of respondents qualified their statements by highlighting the limitations of their data either in their organisational scope or accuracy. These comments typify the general emerging state of the sophistication of the approach to managing work stress and psychological health and safety in general. There appears to be awareness that there is a need to reduce risks associated with this area of people management; however, it is being managed in an ad hoc manner without the rigour, or a systematic approach that is visible in other areas of management responsibilities.

6.5.4 Strategy documentation

Another important element of a system consists of documentation which includes policy, strategy and procedures. This component is particularly significant in light of the newly proposed construct of psychosocial safety climate defined as policies, practices and procedures for the protection of worker psychological health and safety a lead indicator and ‘cause of the causes’ of work stress (Dollard & Karasek, 2010; Dollard, 2012).

While 58% of respondents agreed with the general statement, asked earlier in the survey, that their approach to work stress includes documented policy and strategy, 52% agreed that their organisations had documented processes for stress intervention, but the answers to more specific questions produced a far lower result. As table 6-10 shows below, the reports of specific components of work stress policy and/or strategy were 20% to 30%. Only 17% had a documented commitment and 31% had communicated the policy to their employees. A much smaller proportion (7%) had included specific performance measures within their policy, which enable it to be meaningfully evaluated.

Table 6-10 Proportions of organisations reporting strategic policy elements

Strategy/ Policy element in existence	% Agree
Documented commitment from the Executive	17.20%
Management responsibilities are outlined	27.60%
Policy is communicated to all employees	31.00%
Includes specific measures and targets	6.90%

By contrast, when asked about the presence of OHS policy documentation, 97% of respondents reported their organisation had it in place and in 94% of cases it included a documented commitment from the executive. It appears that the level of documentation relating to managing psychological health, despite equivalent legislative requirements, apply to both areas.

When asked about the effectiveness of their work stress policies and/or strategies the responses indicated that 38% agreed or strongly agreed that it was effective, with only 3% agreeing strongly. Sixty-two percent of the respondents believed that their work stress management strategies were not effective.

6.5.5 Top management commitment

While only 17% of respondents reported they had top management commitment documented in the form of a policy, just over 50% believed that their top management were committed to work stress prevention. Boards or Executive of 14% of organisations are reportedly engaged in work stress issues as a separate, minuted item in meetings and senior management in 21% of organisations. These percentages increase to 59% and 79% respectively for general OHS issues, as shown in table 6-11 below.

Table 6-11 Positive responses in relation to top management commitment

Positive responses to questions regarding management commitment	Response %
<u>Top management committed to work stress prevention</u> – agreed or strongly agreed	51.7%
<u>Work stress</u> issues discussed at <u>board</u> meetings at least quarterly	13.7%
<u>General OHS</u> issues discussed at <u>board</u> meetings at least quarterly	59.2%
<u>Work stress</u> issues discussed at <u>senior management</u> meetings at least quarterly	20.6%
<u>General OHS</u> issues discussed at <u>senior management</u> meetings at least quarterly	78.6%

Another measure of management commitment to dealing with the issue of work stress and PsHS is the budget committed to this program. When asked to nominate this budgetary amount there were a number of different responses, with most being unaware of the exact amounts, despite having a clear knowledge of the OHS budget and/or HR budget. Most respondents qualified their responses by nominating specific programs for which the budget related (e.g. EAP, welfare programs, first aid training, or mental health awareness training). Those respondents who provided

a specific work stress budget showed that the range varied widely from \$2 to \$154 per employee per annum.

6.5.6 Employee participation and awareness

The extent to which employees and managers participated in work stress prevention programs was explored for two reasons: firstly, there are legislative requirements to consult with employees whenever prevention programs or risk management activities are undertaken and secondly, there are both theoretical and practical imperatives to devolve control to workers to increase the chances of the interventions' success (Dollard & Karasek, 2010; Landsbergis, 2009). Participation of workers ('bottom up') and top management support ('top down') in combination have been found to maximise the success of prevention (Kompier *et al.*, 2000).

Sixty-nine percent of organisations reported that 'some' staff meetings involved discussion about work stress; however, none said such discussion occurs at 'all' or 'most' meetings. The proportion of managers and team leaders being involved in work stress prevention programs either 'sometimes' or 'frequently' reported to be over 50%. Staff associations or unions were reported to be involved only by 25%, as shown in table 6-12 below.

Table 6-12 Proportions of organisational roles involved in prevention programs

To what extent are the following people involved in stress prevention programs?	Frequently or sometimes	Rarely or not at all
Senior managers	50%	50%
Team leaders	57%	43%
Union/ Staff associations	25%	71%
OHS committees	43%	50%

OHS committees appear to be involved in work stress prevention or management (only when a particular issue arises) in less than half of the organisations (43%). In all surveyed organisations there were active OHS committees. Such organisational structures typically play an important role in OHS prevention and co-ordination of

action plans, and yet only 10% of respondents reported they deal with work stress systematically as a standard agenda item. Most OHS committees (65%) discuss work stress only when an issue arises, that is in an ad hoc way.

As far as awareness of work stress is concerned, it was found that staff and managers are treated similarly, that is, only half of each group attends work stress awareness sessions, or is offered such opportunities.

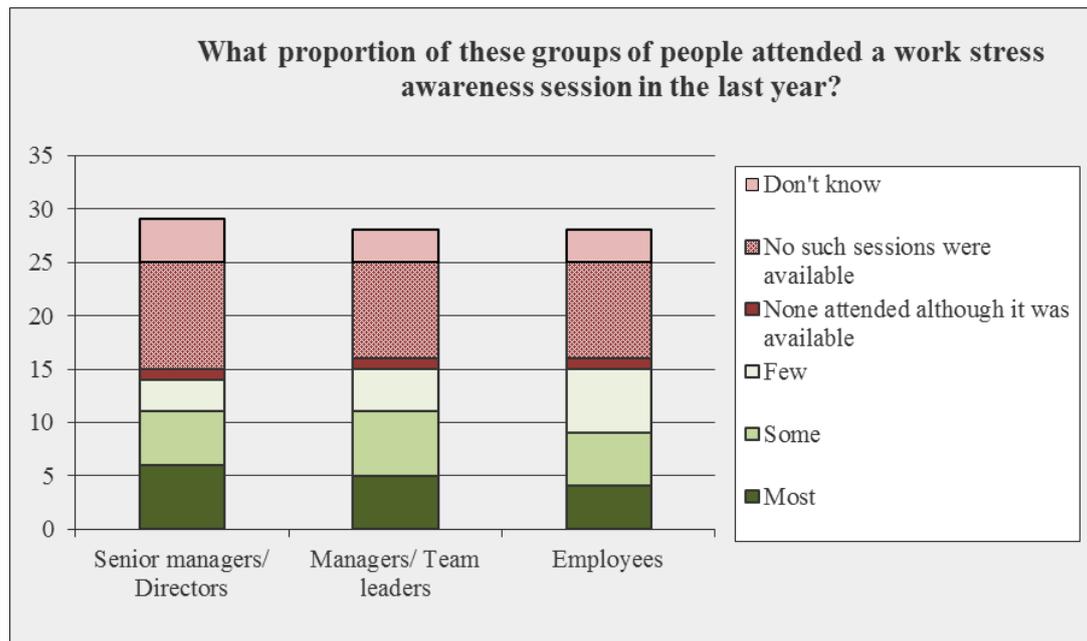


Figure 6-5 Proportions of groups attending work stress awareness session

6.5.7 Integration with OHS system

When asked whether they believed it was possible to manage work stress using the OHS system, HR managers responded with a qualified agreement (93% agreeing overall), but only 7% agreeing strongly, as shown in the pie chart below.

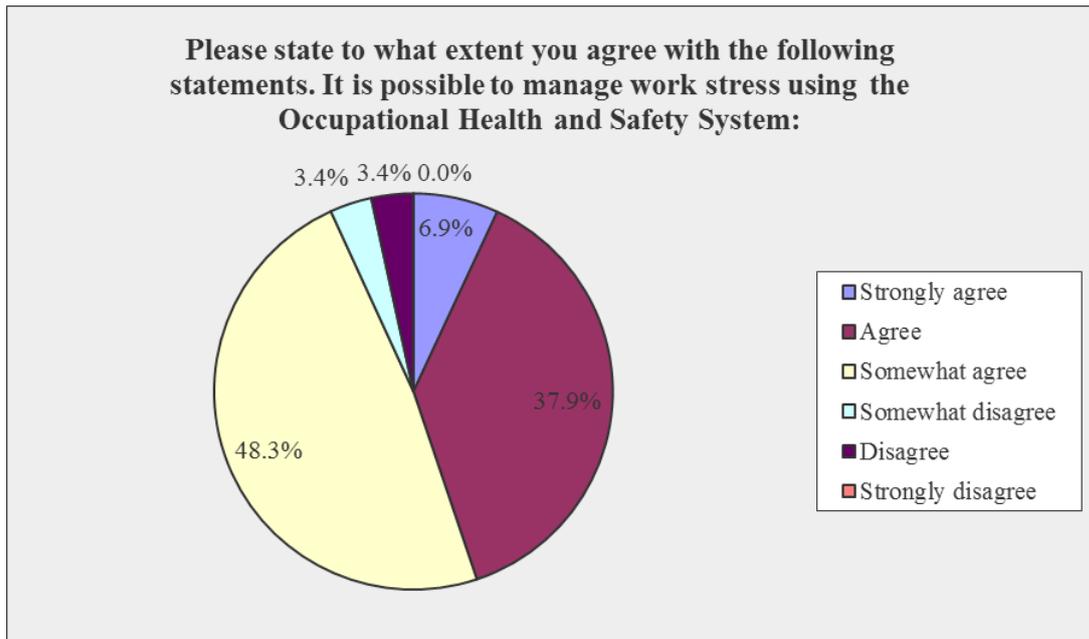


Figure 6-6 Proportions of HR practitioners believing that work stress can be managed within OHS system

They were in less agreement on whether managing psychological health and safety was similar to its physical counterpart, with only 61% agreeing, as shown in figure 6-7 below.

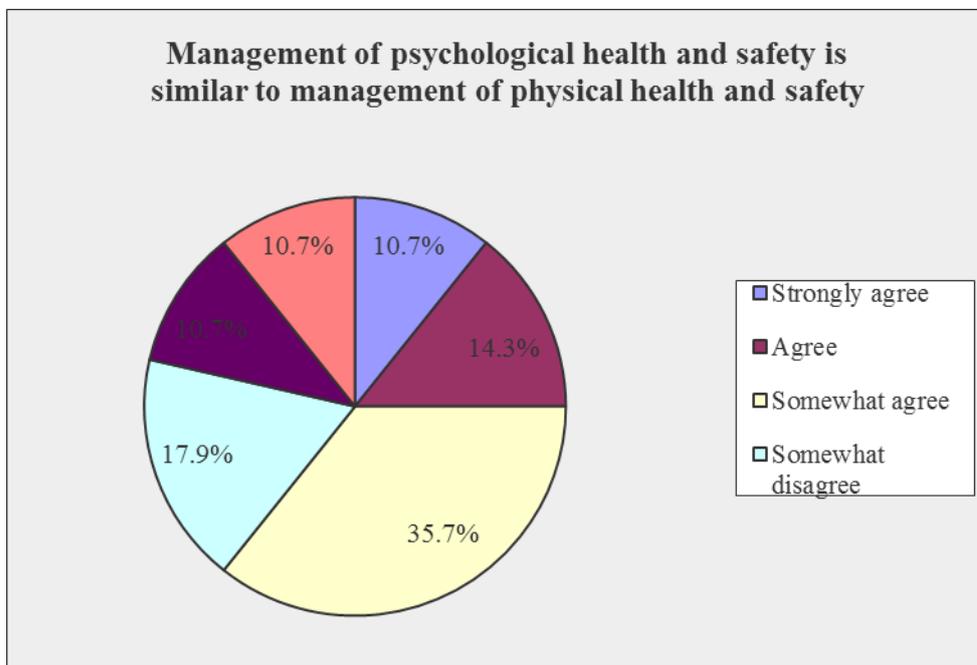


Figure 6-7 Proportions of HR practitioners believing managing of psychological health is similar to managing physical OHS

Having recognised the potential to manage these two health and safety aspects with the same system, they also provided additional comments as to why the differences between them made it difficult to achieve in practice. These differences identified by HR managers could be categorised as follows. In comparison with the physical aspects, psychological health issues:

- have less transparent, multiple and complex causes making them more difficult to identify;
- involve complex interpersonal impacts;
- are less likely to be reported because of privacy issues related to mental health;
- require specialist professional support for risk assessments; and
- lead to responses which are geared towards to an individual rather than the organisational system.

They acknowledged, however, in general that, subject to dealing with some of these differences and complexities, the risk management process could be the same, as there are also similarities in terms of work-related injury. A large majority (86%) also agreed, although not strongly with the statement that risk management approach is effective in preventing work stress. The largest single group (46%) only 'somewhat agreed' with this statement, indicating ambivalence with respect to integrating the two systems.

Only 21% of responding HR managers agreed or strongly agreed that they have adequate skills to conduct work stress risk assessments. A larger proportion (31%) did not believe they had adequate skills. About half were unsure, selecting the either 'somewhat agree/disagree' options. There was a similar uncertainty observed in relation to the beliefs about the executive management's expectation to apply risk assessments in this area.

Consistently with the findings that most organisations manage work stress in an 'ad hoc' manner, there appears to be more evidence from the HR practitioners' survey that there is little integration of PsHS and OHS systems. There is generally some

recognition that the two aspects of employees' health can be managed using the same processes, however, in practice there is reluctance to do so.

6.5.8 Evaluation and review

Providing further evidence that very few organisations have mature systems to manage psychological health and safety are the reports from HR managers that there is little evaluation taking place in this area of management responsibility. Less than 4% reported evaluating the strategy at least once a year and 25% reporting that evaluation, which is a significant element of an effective system, takes place every few years, as shown in figure 6-8 below.

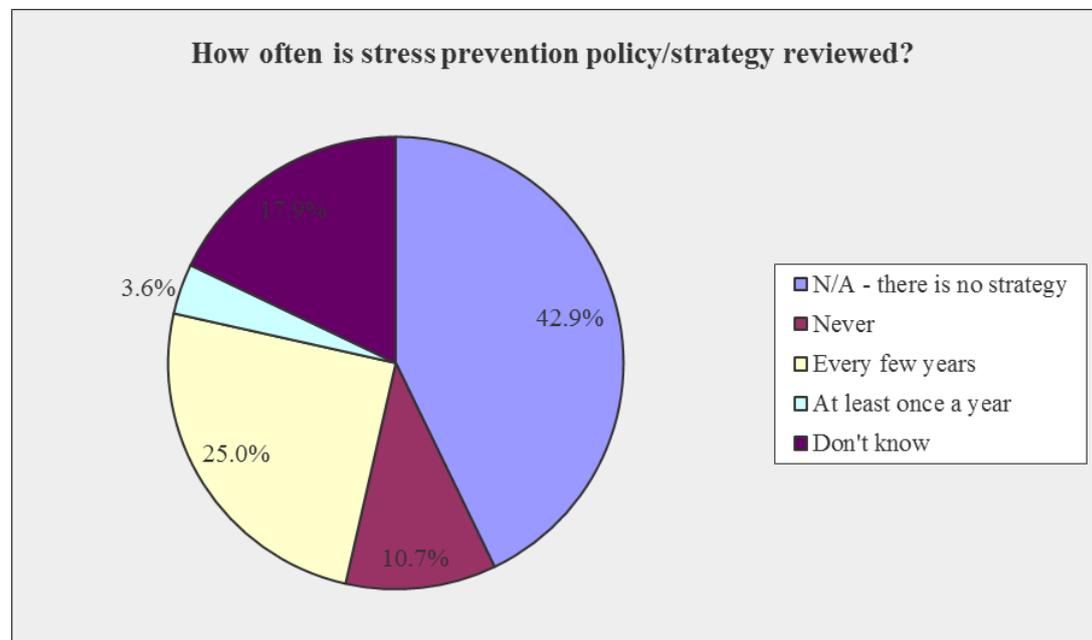


Figure 6-8 Proportions of organisations reviewing work stress prevention policies

6.5.9 Barriers to systemic stress prevention

The HR manager survey elicited responses regarding their perceptions of the barriers to implementing systemic stress prevention programs in their organisations. The responses could be classified in the following categories, in the order of most often mentioned barrier:

- lack of awareness/ understanding/ skill;
- low executive/ management support;
- production priority;
- reluctance to disclose/ identify stress;
- unnecessary / No recognition that it is a problem; and
- inadequate time / resources.

The first two factors were repeatedly mentioned by at least 30% of the respondents. The emphasis of their commentary was on the lack of awareness and understanding (e.g. *'A clouded understanding of what stress is and what strategies can be implemented to mitigate it; Poor understanding of the basis of what is stress and therefore stress prevention; Lack of understanding about nature of stress and its causes - not knowing where to start'*).

Only one organisation surveyed (less than 3%) reported they have experienced no barriers to dealing with work stress and described it as being 'culture driven' with the emphasis by senior management on staff safety and wellbeing. The significant observations provided by this organisation were that their OHS systems were rigorously managed, having high physical risk exposure; however psychological issues were managed by a separate department (Organisational Development) managing their EAP, enabling it to be managed *'more sensitively and less publicly'*. This organisation quoted healthy people outcomes (*'high levels of engagement, low turnover, low sick leave, low absenteeism'* etc.), reporting that their *'organisation was effective in preventing/managing stress'*, and believed that *'we have best working as part of an holistic strategy'*. However, their comments also indicated that psychological health was treated differently from OHS but purposely managed through other systems if at all systemically, as indicated by this comment: *'An overly systematised approach would be misperceived in our highly collegiate culture – as it is currently, it is an embedded value, which is much more effective.'*

These findings seem to indicate that there is a reluctance to apply systemic approaches to PsHS and to integrate it with OHS management systems. HR practitioners, in general, appear to treat favourably the separation of the two areas of

health, as they perceive them to be different in a number of aspects. As they play a significant role in educating and advising line managers on this area of their people management responsibilities, they are likely to influence them towards this approach and away from that prescribed by legislative requirements and that advocated by researchers.

6.6 Chapter discussion

While the main limitation of this study relating to its sample size need to be borne in mind, there are some tentative conclusions that can be drawn. A consistent finding throughout the interviews and the organisational survey was the lack of clarity amongst HR managers with regard to what constitutes a systemic approach to work stress prevention. Their answers indicated that while they believed their management of psychological health was integrated with their OHS management, other responses to probing questions about its specific elements revealed a different scenario. Their reports varied widely, from over 60% reporting they conducted work stress risk assessments, but in a general question down to 20% when asked about whether they conducted such assessments within a specific timeframe in the last two years. There was a similar discrepancy between a high proportion of reports (over 50%) that top management was committed to work stress prevention, but a much smaller proportion (17%) providing evidence of a documented policy/strategy statement to that effect.

There was also a stark contrast between the physical OHS management system which was far more developed, with above 90% compliance with OHS and somewhere of the order of 10 to 30% compliance with PsHS requirements. This finding was evident in a number of aspects of system elements including documentation, commitment from top management and risk assessments. This finding is line with the findings from the European countries comparing the adoption of psychosocial risk management to general OHS system implementation (EU-OSHA, 2012).

There appears to be awareness amongst HR managers for a need to reduce risks associated with this area of people management; however, it is being managed in an

ad hoc manner without the rigour or a systematic approach that is visible in other areas of management responsibilities. Consistently with the research proposition that most organisations manage work stress in an ad hoc manner, there appears to be solid evidence to support this from the HR practitioners' survey. There were no organisations with a demonstrated integration of PsHS and OHS systems. There is generally some recognition that the two aspects of employees' health can be managed using the same processes, but in practice there is reluctance to do so.

According to Zwetsloot's (2000) model of organisational maturity in the implementation of OHS management systems, most organisations fall into the ad hoc stage, which is defined by low expertise and reactive. A small proportion satisfy the systematic stage where regular risk assessments, action planning and prioritisation of implementation of control measures takes place, as well as some skill development in the relevant area of OHS expertise. None of the surveyed organisations could be classified as operating in the system or proactive stage, according to this framework. An adapted model of organisational development in this area of PsHS management plus estimates of current experience in Australian organisations based on interviews and survey results is presented in table 6-13 below. The estimated percentages of the current status in Australia have been generated from the responses to the survey questions in relation to the extent of the systemic nature of the PsHS in their organisation.

This information has implications for the development of regulations which assume a greater sophistication of the organisational systems and their readiness to manage psychological health using OHS methodology. The lessons from the early development of OHS management systems and their adoption need to be revisited, if the PsHS can be successfully implemented.

Table 6-13 Development stages of PsHS implementation maturity

Stage of development	Description	Estimated current status in Australia
Nil	Non-existent reporting and management of work stress Lack of awareness of psychosocial aspects of people management Management of work stress issues limited to injury and compensation claims	6%
Ad hoc	Reactive to problems and incidents as they arise Low level of knowledge and awareness of work stress No evidence of risk management methodology applied to work stress prevention/ intervention No PsHS policy or procedure documentation No skills in work stress risk management processes	84%
Systematic response	Risk assessments take place within parts of the organisation Awareness and knowledge of work stress issues planned throughout the organisation. Skill development in work stress risk management	7%
Systemic proactive	Continuous structural attention to PsHS prevention and management Processes and procedures available for work stress management Risk assessments systemically and proactively applied Skill expertise in work stress risk management. available throughout the organisation	3%
Integrated	Fully integrated OHS and PsHS management systems PsHS integrated into business processes Structured participation of employees in risk management Highly developed skills and awareness of work stress and mental health continually fostered PsHS management is culturally embedded as contributing positively to organisational effectiveness	0%

Source: Adapted from Zwetsloot, 2000

Key barriers to systemic PsHS implementation identified through both interviews and surveys were as follows:

- inadequate knowledge and awareness of work stress;

- inadequate skills and confidence, particularly in PsHS risk assessments;
- uncertainty and ambivalence about the effectiveness of OHS and PsHS integration and whether risk management is an appropriate tool;
- low support from top management;
- complexity of both the organisational context and psychosocial issues within the workplace;
- insufficient resources of time and budgets;
- belief that psychosocial risk management process does not produce long-term results; and
- reluctance and fear linked to disclosure and identification of work stress as an issue.

6.7 Summary

This chapter outlined the elements of an OHS management system and provided a more in-depth description of the comparable elements of PsHS. The basis for the HR manager survey tool development was presented, consisting of research in both areas of system management and face-to-face interviews conducted with six HR practitioners. The early part of the chapter described the significant aspects of the PsHS, namely risk assessments and employee participation.

The results of both the interviews and HR manager surveys were presented, confirming key findings that most organisations manage the psychological health by taking an ad hoc approach, and tend to be reactive to arising issues rather than proactive and preventive. While a number of activities take place in the area of prevention, most of the efforts are directed to individual support through EAP and work stress awareness, resilience skills or communication training. A new developmental model of system implementation maturity was developed.

A number of barriers to a systemic implementation of the PsHS were identified from the HR managers' perspectives, gathered from two sources: interviews and survey responses. HR managers' beliefs about work stress and prevention approaches were also explored.

The next chapter provides further insight into the organisational approaches to work stress prevention from line managers' perspective. More particularly, it concerns itself with the conceptualisation of work stress amongst managers and its influence over the PsHS prevention approaches of the organisations under their control.

7 Study 4: Managers' beliefs and attitudes relating to work stress

7.1 Introduction

The previous chapter explored the question of how organisations approach work stress prevention as reported by the HR/ OHS operatives. It presented research data from interviews and the organisational survey, concluding that most organisations' PsHS systems are non-existent, or are at the beginning phases of their development. Most organisations were found to manage the psychological health in a reactive and ad hoc manner and are directed to an individual rather than systemically. The last chapter also began to probe beliefs about work stress and its prevention from the HR/ OHS advisors' perspectives, beyond their reports about the factual state of their organisations' systems.

This chapter seeks the answers from the line management perspective, where decisions are made and stress management programs are implemented, typically without any in-depth knowledge or skill in psychological health and safety requirements. It explores beliefs and attitudes of line managers and their relevance for approaches to work stress prevention. It specifically addresses the conceptualisation of work stress amongst managers and its influence over the PsHS prevention approaches of the organisations under their control. Managers' conceptualisations and attitudes were explored using the Theory of Planned Behaviour (TPB) framework (Ajzen, 1991).

More in-depth analyses of barriers to the adoption of a systemic approach are presented as they are linked to managers' beliefs, based on the data gained from the interviews and surveys targeted at line managers with people management responsibilities. Comparisons among line managers' attitudes to work stress prevention are also offered.

Prior to presenting the Study 4, this chapter begins by summarising the relevant research into managers' beliefs and attitudes relating to OHS, PsHS and risk.

7.2 Managers' beliefs about OHS and PsHS

Managers' beliefs about and attitudes toward OHS have been studied for a considerable period, as one of its key system elements is known to relate to management commitment to policy implementation. Securing management commitment has been found to be motivated by a range of influences including, to a large extent, awareness of the possibilities and consequences of legal action (Bluff, 2003). Management commitment has been identified as necessary, not just to provide leadership and resources, but also to influence the actions of managers, supervisors and other organisational change agents toward planning, prioritising and decision making. Management, in general, and management commitment have been found to be central to and measured by most safety climate studies (Yule, Flin & Murdy, 2007).

The more recent research focus on organisational safety culture to improve the effectiveness of OHS systems and outcomes identified three levels for model development: core underlying assumptions; espoused beliefs and values; and behaviours and artefacts (Schein, 1992). Just as safety climate can be seen as a sub-facet of organisational culture, as argued by Cooper (2000), safety climate related to psychological health can be thought of as a sub-element of the general safety climate. Dollard and Bakker (2010) defined more precisely a psychosocial safety climate construct and explained how this construct, as influenced by senior management, affects psychosocial working conditions and in turn psychological health.

Management attitudes to risk are also relevant to the priority with which OHS systems are treated in organisations. Numerous studies of factors influencing risk perception of accidents and physical injuries identified strong links to safety climate, work conditions and management's commitment to safety, with the more positive safety climate being associated with lower risk (Rasmussen & Tharaldsen, 2012). A model of safety climate proposed by Yule, Flin and Murdy (2007) stipulated senior managers can reduce risk-taking behaviours by investing in the knowledge and training of their workforce and by encouraging supervisors to be

more involved in safety activities. Their beliefs and attitudes to safety are thus fundamental to prioritising these activities.

While psychosocial risks are widely acknowledged as important challenges in occupational health and safety, there is a gap between stated goals at the international level (e.g. European Commission, 1989) and their implementation. The attitudes of decisions makers at a national level were recently identified as being responsible for this gap. Key barriers to their implementation and the lack of acknowledgment of stress-related issues were reported to be: “lack of awareness about work-related stress”, “low prioritisation of psychosocial issues”, “specific regulations on the subject are limited or lacking” and “the lack of appropriate tools/methods for assessing and managing stress” (Iavicoli *et al.*, 2011).

Managers’ conceptualisations of work stress, their attitudes to its manifestation in the workplace and to prevention approaches are significant to understanding the barriers to their implementation. As discussed earlier in Chapter 2, limited research is available to support the relationship between managers’ conceptualisation of stress and their prevention behaviour (Dewe & O’Driscoll, 2002). Sharpley and Gardner (2001) also identified some contradictions between managers’ beliefs about stress and their views about stress interventions. Lay representations of work stress were also shown to have an impact on their personal remedial action and on the organisation’s response (Kinman & Jones, 2005). To shed light on this issue both surveys and interviews were conducted.

7.3 Methodology for this Study

Study 4 involved a survey of managers and its methodology was introduced in the methodology section in Chapter 3 (section 3.9.4). The sections below outlines in more detail the survey design and its implementation.

7.3.1 Survey design

The managers’ survey design here took into account past research into managers’ conceptualisation of stress (Dewe & O’Driscoll, 2002; Kinman & Jones, 2005;

Sharpley & Gardner, 2001). The survey items used here were developed to determine managers' understanding and beliefs of work stress in terms of its meaning, relevance to their workplace and society in general including causes, impacts and prevention strategies. The survey focused in more depth on specific aspects of prevention approaches and beliefs about the compatibility between OHS and PsHS systems.

Some questions were open ended in structure to allow the participants to reveal their opinions without them being value-laden (e.g. 'How would you define work stress?'). Some were structured and followed the 6-level scale of 'strongly agree' through to 'strongly disagree'. Others used frequency scale of occurrence from 'frequently' through to 'not at all'. The 6-level scale was used to provide broader scales, with three degrees of agreement/ disagreement strength and to avoid central tendency bias. In the light of the discussion about the vagueness of the definition of work stress and related conceptualisation, the 6-level scale was considered to avoid the neutral response option and thus elicit more definitive tendency towards either positive or negative perceptions.

A set of questions explored the extent to which the participants' organisation implemented a PsHS systemic approach, which enabled triangulation of data between HR / OHS practitioners and line managers in this area. This enquiry was limited to four questions to keep the survey as brief as possible, as opposed to the survey targeting HR / OHS staff who were expected to have much more to contribute on this subject.

Another area of enquiry related to TPB (Ajzen, 2009), which stipulated that key concepts act as precedents to the intention to carry out a certain action, in this case implementing a work stress prevention initiative. The following concepts were explored through this survey and include: attitudes towards prevention; outcome belief that prevention is effective; normative beliefs about top management expectations; perceived control about their capacity; and finally their intention to act on work stress prevention. This set of questions provided a basis for conceptual analysis of the attitudinal change required to overcome barriers to systemic prevention.

Managers were also asked directly about their perceived barriers to their organisations' implementing a systemic approach and the most convincing rationale for their implementation. These were open-ended questions.

The participants' demographics collected by the survey of organisations as represented by respondents included the following items which corresponded to the organisational surveys for ready comparison:

- organisational type (government, private, not-for-profit);
- industry classification of their organisation;
- size – number of employees in their organisation;
- geographical scope of the organisation – States within which their organisations operate;
- gender;
- age range (in four categories); and
- position level of management (in three categories: supervisor, middle level and executive).

A copy of the complete survey tool used in this study is presented in Appendix D.

7.3.2 Interviews with managers

The managers' survey was piloted during the interview phase of this research in a mirror design to the organisational survey, to enable triangulated comparisons between the data collected from different perspectives. The managers were drawn from the list of organisations which formed a subset of those included in the organisational survey presented in Chapter 6. Managers were either contacted directly via email and requested to participate by the researcher or were invited by the HR/OHS operatives who participated in the organisational survey. HR/OHS practitioners were requested to nominate up to five managers from their organisation for interview. Each respondent was informed of Victoria University's Human Research Ethics Committee's approval and provided the relevant contact details. The participants were provided with a copy of the survey during interview

and were asked to comment on the clarity of the questions. Their feedback was used to refine the survey tool.

Eight managers were interviewed on a one-to-one and face-to-face basis by the author, using the survey tool as the structure of the interviews. The interviews took place between August 2011 and February 2012. Each interview took approximately 60 minutes. The interviewees originated from a state government organisation, a human services organisation and local government councils located in Victoria. All organisations were larger than 1000 employees in size. Written records of the interviews were kept and analysed directly as well as using NVivo v9 software tool. The interview data about managers' beliefs and attitudes were added to answers to the open-ended questions provided by the survey participants, as both groups answered identical questions, namely:

- How would you define work stress?
- If you ever experienced work stress personally, what do you believe were its causes?
- What do you believe is the best approach to preventing and managing stress in the workplace?
- What do you believe is the most convincing rationale for implementing work stress prevention programs?
- What do you believe are the main barriers to implementing systemic stress prevention programs in your organisation, if any?

A preliminary conceptual framework was developed, which reflected the interview and survey structure, comprising five superordinate categories: 1. Conceptualisation of work stress, 2. Beliefs about causes of work stress with reference to others and to self, 3. Beliefs about responsibility for managing it, 4. Beliefs about preventing and managing work stress and 5. Intention to implement prevention. The robustness of the synthesis underpinning the preliminary conceptual framework was assessed in two steps: by re-analysing a subsample of interview and survey records.

7.3.3 Sample considerations

The population for the purpose of the managers' survey matched, reasonably closely, that of the organisational survey reported in Study 3 (see Chapter 6). Thus it was mostly comprising managers whose organisations operated in Victoria, with a particular emphasis on government and human service organisations, for the same reasons outlined in Chapter 6 (i.e. explicit inclusion of psychological health in the OHS Act 2004 (Vic) and availability of WorkSafe Victoria guidelines for the management and prevention of work stress for government and human service organisations). Given the similarities of legislative instruments in other states, these guidelines are applicable in any jurisdiction.

The managers were invited to participate directly via email. Their addresses were sourced from marketing databases and the population from which the sample was drawn had the following industry demographic profile.

Table 7-1 Organisational types of managers' survey population

Organisational type	Number of managers contacted
Commonwealth government	41
State government	259
Local government	30
Not-for-profit	101
Private	277
TOTAL	708

Similar to the organisational HR/OHS survey, managers' response was low, and there were 50 direct follow-up contacts made via telephone calls and emails in March to April 2013 to encourage their participation.

The managers' survey was conducted between May 2012 and June 2013 and yielded 48 participant responses. Two follow-up emails were sent to the original database a month apart and then further activity to generate additional responses ceased, so as not to be perceived as being unreasonably persistent or harassing.

7.4 Interview results

7.4.1 Demographics of interviewees

The eight interviewed managers represented local government (5), state government (1) and health care and human services (2). All organisations to which the interviewees belonged had over 1000 employees. All managers were senior executives, including one CEO, director level positions and senior managers responsible for sections employing at least 100 employees.

7.4.2 Interview findings

The interview results relating to managers' beliefs and opinions about work stress and its prevention are included in the analysis of the survey findings. Since the interviews were following the structure of the survey instrument, it was possible to precisely relate their responses to those collected through the survey.

The interviews provided, however, an opportunity for a more in-depth questioning of attitudes underlying management responses. This additional information, provided through the elaborations to their initial responses, is discussed below in relation to a number of key attitudes around which the interview and survey were constructed.

Defining work stress was problematic to most interviewed managers. It seemed as though they had never considered this concept deeply before and did not have precise terminology to describe it, revealing their low level of understanding. They struggled to answer the question that was simply put: 'How would you define work stress?' As they invariably started to explore this definition with the notion that it is neutral and can be either positive or negative, they generally concluded that nevertheless it was predominantly thought of as a negative concept. Some responses typical of their exploration of this concept were as follows:

It is neutral, to answer simply, because you need the right amount of stress to improve the right level of performance. It's difficult to define the line between when there is right amount and when it is excessive and then becomes negative.

The concept of stress is usually negative. If there is a high target to achieve it can be negative even though stress can result in superior performance.

The best way to describe stress is through an analogy of a ship. I am in charge of the ship that has to [move] forward with a clear strategy. Each day there are pressures that can take us off that course and cause all sorts of stresses that can have an adverse effect if I let them. My role as a manager is to make sure the ship is moving forward and deal with layers of conflict that are trying to take it off its course.

Work stress is about coping and prioritising conflicting demands. Something that stops them from doing a good job and then people can get stressed. Sometimes they have a conflict about their role. People generally want to do a good job. If they are loaded sometimes we have to give them a concession. It is about understanding and influencing your job. It is very complex, because it is not just a load.

These quotes provide a glimpse into the managers' convoluted ways of understanding the concept of work stress. Some became embarrassed about their inability to answer what seemed like a straightforward question, and others apologised for their long-winded and vague responses. Most eventually concluded there was no simple explanation and that the term itself has become meaningless, as exemplified by the following statements:

Work stress is a useless term. Whenever people say it, you jump in your mind to compensation.

People keep using the words 'I am bit stressed' or 'I am stressed out' but they could mean different things to different people and the meanings depend on personalities and experience.

I wonder if work stress is relevant because it's become such a turn of phrase that could mean anything.

When reflecting on the cause of work stress, they typically focused on the personal aspects of the individual and, when faced with the decision as to whether the cause could have been linked to an organisational aspect, they concluded that it was something to do with the interaction between the individual and their environment. This conclusion, however, typically followed a moment of reflection after their initial reaction, which is exemplified by the following comments:

The root cause of stress is personality. It is the individual personality that determines how the person will respond to it.

People are not as strong as they used to be. They have lost resilience. Something can trigger a reaction and previously they wouldn't respond to. It is a projection of the individual's internal world into the environment. People bring their personal issues and then project them into the workplace.

The root cause is how you react to it [work stress]. It is neither individual nor organisational. Personal issues are not the factors that are influencing coping with adversity – it's the individuals who can't accept them.

It [work stress] is something in the eye of the beholder. It's subjective and is dependent on the person.

While generally deciding that stress is both negative and resting predominantly with the individual personality or personal reactions when discussing work stress in conceptual terms, most identified the causes as being external when discussing their own personal experience (e.g. workload, unreasonable demands, conflict with those above them, and or lack of support). Also, most participants attempted at least to some extent to reflect on their experience of stress as being growth promoting (i.e. labelling it as positive). Only one interviewee readily recognised this apparent contradiction between the earlier responses in relation to others' and that relating to themselves.

My personal experience has been positive because I've learnt to deal with it and process the impact of various events and then in the long term it has had a positive outcome.

My personal experience has been at times negative, especially in the short term but then in the long term, once I recognised it and learnt to put mechanisms in place to manage it, then it had a positive effect on my life overall.

In my personal experience, stress is not a negative thing. I have a relatively high tolerance of stress and I am managing people through that situation. It's positive in a sense that I manage it well. I would rather have a situation where I wouldn't have stress. So I would say it is neutral for me.

Overall, the conceptualisation of work stress appeared to be fundamentally lacking clarity for managers and their uncertainty about its meaning underpinned their opinions about its causes and responsibility for its prevention and management. Their beliefs about the role of risk management and its appropriateness in this context were equivalent to those presented by survey respondents, hence they are analysed together in the section below.

7.5 Survey results

7.5.1 Surveyed managers' demographics

There were 48 responses to the managers' survey out of a possible 708. The numerical analysis of the survey presented below includes rounding of percentages to one decimal point.

There was an even representation of gender amongst the survey respondents, with 53% female and 47% male. Most respondents were older than 40, as could be expected from the seniority of their positions, as shown in table 7-2 below.

Table 7-2 Surveyed managers' demographics – age

Age bracket	Response %	Response count
< 30 years	6.3%	3
31-40 years	22.9%	11
41-55 years	58.3%	28
>55 years	12.5%	6
<i>answered question</i>		48
<i>missing data</i>		0

As far as the type of organisation represented, over 53% of the respondents were from the government sector, 38% from the private sector and 9% from the not-for-profit sector, as shown in the table below. When comparing the number of response rates in each sector to the population to which the invitations were emailed, both the government and private sector yielded approximately a 7% response rate, whereas the not-for-profit sector had a lower rate of just under 4%.

Table 7-3 Surveyed managers' demographics – organisational type

Organisation Type	Response %	Response count
Government	53.2%	25
Private	38.3%	18
Not-for-profit	8.5%	4
<i>answered question</i>		47
<i>missing data</i>		1

There was a range of sizes of organisations represented amongst the responding managers, with the greatest proportion of them belonging to large organisations. Over 50% of the organisations represented in the managers' sample had over 1000 employees, and 34% over 5000.

Table 7-4 Surveyed managers' sample demographics – organisational size

Number of employees the organisation employs	Response %	Response count
< 100 employees	14.9%	7
101-500 employees	17.0%	8
501-1000 employees	14.9%	7
1001-5000 employees	19.1%	9
> 5000 employees	34.0%	16
<i>answered question</i>		47
<i>missing data</i>		1

Similar to the organisational survey, the vast majority of managers (96%) operated in Victoria and between, 20 to 25% had operations in other states.

Table 7-5 Surveyed managers' sample demographics – state

States the managers' organisations operated in	Response %	Response count
Vic	95.7%	45
Tas	21.3%	10
SA	25.5%	12
WA	27.7%	13
NSW	27.7%	13
Qld	29.8%	14
NT	21.3%	10
ACT	21.3%	10
<i>answered question</i>		47
<i>missing data</i>		1

The respondents were asked to select one of the three options for the best description of the level of their position. The results of their selections are shown in table 7-6 below. The largest group described themselves as executive/ senior managers (46%), followed by middle level managers (38%) and the smallest size group was at the lower level of team leader/ supervisor (17%).

Table 7-6 Surveyed managers' sample demographics – position

Position that best described the respondent	Response %	Response count
Executive/ Senior manager	45.8%	22
Middle level manager	37.5%	18
Team leader/ Supervisor	16.7%	8
<i>answered question</i>		48
<i>missing data</i>		0

7.5.2 Relevance and significance of work stress

The survey asked three questions relating to the perceived relevance of work stress as a concept in the respondents' workplace, to gauge the degree to which managers believed that this issue was significance. The first question related to the relevance of work stress to the respondent's own workplaces. The second tested the extent to which they believed work stress has been increasing in the last decade. The third

tested the agreement that costs related to work stress are significant in our society. A 6-item scale of agreement from ‘Strongly Disagree’ to ‘Strongly Agree’ was applied to each of these questions.

Forty-four responses were registered for each of these questions and their results are shown in figure 7-1 below. As the graph shows, the majority of responses to each of these questions were in agreement, a small disagreement (7%) was noted only to the question of stress increasing in the last decade, and none at all to the questions relevance and significance. The overall agreement (combining ‘Strongly Agree’ and ‘Agree’ responses) was very similar (86%) to both questions of relevance to the workplace and costs for the society. These findings confirm that managers’ beliefs about work stress in general are in line with the economic data and expert opinions, indicating that work stress is one of the most costly and highest priority risks facing organisations in Australia and internationally.

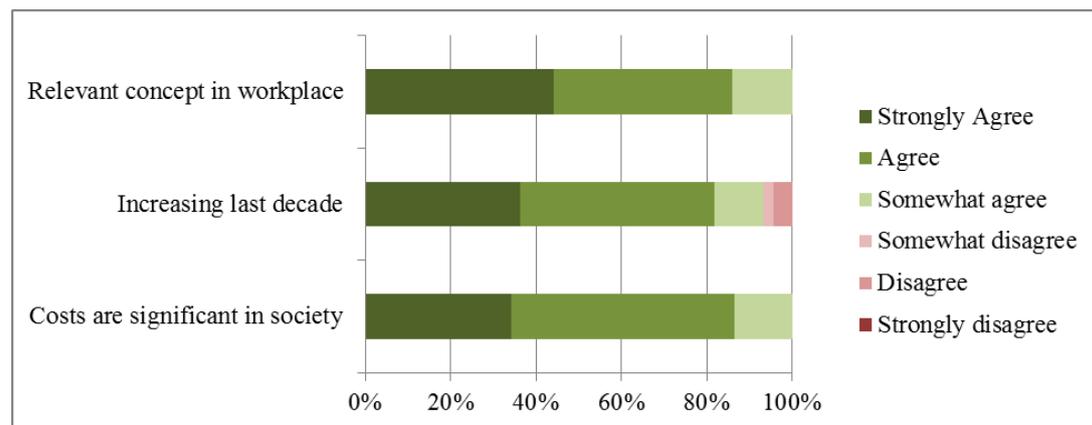


Figure 7-1 Beliefs about the significance of work stress as a problem

7.5.3 Work stress definition and conceptualisation

Forty-five participants attempted to define work stress in response to a free text item in the survey and an open-ended question in interview. Similar to other studies of managers’ attitudes to stress (e.g. Dewe & O’Driscoll, 2002) the participants overwhelmingly reported their understanding of work stress as having a negative connotation. Ninety-one percent of respondents only mentioned the negative aspect of stress in their free text definitions, with only three (7%, N=45) referring to its positive meaning. The same group of participants reported in their answer to the

specific question about how they perceive stress, that a clear majority (77.8%) think of it as negative and very few (4.4%) as positive, as shown in table 7-7 below.

Table 7-7 Managers' beliefs about work stress polarity

I think of work stress as a concept that is mostly:		
Answer options	Response %	Response count
Positive	4.4%	2
Negative	77.8%	35
Neutral	17.8%	8
<i>answered question</i>		45
<i>missing data</i>		3

Some phrases offered in their definitions included the impact of or reaction to work stress. Its impact on employees' physical health was mentioned by 31% while psychological or mental health by 24% of respondents. Only five respondents (11%, N=45) directly mentioned impacts on the organisation, its functioning or the efficiency of the organisation. When asked a specific question about the impacts of work stress on individuals and organisations, in terms of whether they were negative, positive or neutral, over 80% selected the negative impacts, with the lowest agreement about its impact on the organisation, as shown in table 7-8 below.

Table 7-8 Managers' beliefs about the impact of work stress

Work stress has the following impacts on:				
Answer options	Positive	Neutral	Negative	Response count
the individual's physical health	2	7	36	45
the individual's psychological health	2	5	38	45
the organisation's function	3	10	32	45
<i>answered question</i>				45
<i>missing data</i>				3

A typical definition had both elements of work factors and an individual reaction (i.e. stimulus in the environment and the response, see Jovanovic *et al.*, 2006). For example:

Feeling overwhelmed by the workload or an element of the work role.

Negative feelings and behaviours exhibited by an employee which can be attributed to their role, tasks, working relationships or work environment.

Most respondents identified some work factor in their definitions (80%), with the highest frequency words used being ‘pressure’ (11 out of 45, or 24%) and ‘workload’ (22%) or ‘demand’ (13%). Just under half (47%) identified an individual reaction to those work factors – most commonly expressed in the areas of physical, mental/ psychological/ emotional negative outcomes.

It could be argued that those who identified both work factors and an individual reaction were expressing an interactional or transactional nature of work stress (Cox & Griffiths, 2010). Forty-two percent of responses were in this category of having mentioned both a stimulus and a reaction. Few responses, however, clearly referred to an interaction between the environment and the individual. Only two respondents (4%, N=45) referred specifically in their definition as including an interaction between the individual and their work environment.

Following the open-ended question relating to the meaning of work stress, the survey included a forced choice question asking respondents to rank the three groups of meaning from ‘most agreed’, ‘somewhat agreed’ through to ‘least agreed’. The three categories were based on Kinman and Jones’ (2005) groupings, with their results showing the following responses:

- a Stimulus: i.e. negative conditions in the workplace reported by 33% of their respondents (n=15);
- a Stimulus-Response relationship: i.e. an interaction between working conditions and individual factors reported by 47% (n=21); or
- a Response: i.e. various health and performance-related factors reported by 29% (n=9).

The responses to the forced choice question in this study are shown in table 7-9 below.

Table 7-9 Managers' responses to forced choice ranking of the meaning of work stress

Please rank the following statements about the meaning of stress, according to what you think of stress (where 1 means you agree with it the most and 3 the least). Work stress is best defined as:				
Answer options	1 - Agree most	2 - Somewhat agree	3 - Agree least	Response count
An individual's reaction to something	21	9	7	37
Something in the environment or organisation	4	11	19	34
An interaction between the individual and the environment	18	18	5	41
<i>answered question</i>				44
<i>missing data</i>				4

The greatest number of respondents 'agreeing most' to the definitional category seemed to be 'an individual reaction' (49%, n=21). It was closely followed by the interaction between the individual and the environment (42%, n=18). Clearly, the stimulus ('something in the environment') as the primary definition was rejected as a definition of work stress, with only 9% (n=4) agreeing that it was the best definition.

The frequency of an 'interaction' definition seemed to be consistent across the open-ended survey question's thematic analysis, the forced choice question and the Kinman and Jones' study (a range of 42 to 47%). A 'reaction' definition had less agreement amongst these three sources of data (a range of 29 to 49%). However the results relating to a 'stimulus' definition showed the greatest variability, with the Kinman and Jones' study reporting it in 33% of their responses, 80% of the survey respondents listing some workplace factor in the free text definition, and in the forced choice question, only 9% offering the stimulus (something in the environment) as their first definition with which they mostly agreed. These differences in managers' responses about the meaning of stress are presented in table 7-10 below.

Table 7-10 Comparison of managers' responses relating to the meaning of work stress

Responses to the meaning of stress			
Answer options	% Agree most responses in forced choice question	% Responses containing this element in free text question	% Responses reported by Kinman and Jones (2005)
An individual's reaction to something (Response)	49%	47%	29%
Something in the environment or organisation (Stimulus)	9%	80%	33%
An interaction between the individual and the environment (Interaction)	42%	42%	47%
	<i>answered question</i> 43	45	45

The significant discrepancy between the free text definitions and forced choice in identifying the stimulus in the environment points to the confusion amongst the managers as to the meaning of work stress. When faced with the task of having to define it in their own words, it is likely they responded with the accepted meaning as influenced by their training and/ or shaped by the media. When being forced to choose the highest order meaning, they tended to reject the notion that work factors are responsible for work stress, and rather focused on the reaction or symptoms of the individual. This area of confusion is most significant for the PsHS system, particularly for its risk management components, as the hazards are classified as the sources of work stress. If there is an underlying confusion in the beliefs that managers hold as to the nature of stress hazards, it could contribute to the explanation of their reluctance to implement or utilise such a system in their workplace under their control. This issue is taken up further in the discussion chapter (Chapter 9, section 9.3.3).

If the 'agree most' was given the value 3, 'somewhat agree' 2 and 'agree list' 1, the following figures indicate that an interaction between the individual and the environment has an overall greatest agreement, followed closely by the individual's reaction.

Table 7-11 Comparative values of perceived individual versus organisational causality

Work stress definition option	Total ranking value
An individual's reaction to something	88
Something in the environment or organisation	53
An interaction between the individual and the environment	95

7.5.4 Personal experiences and conceptualisation

When asked about their own experiences of work stress, almost 18% of managers reported that it was positive, 29% reported it was neutral and 53% reported that it was negative, as shown in table 7-12 below. This compared with 4%, 18% and 78% respectively when asked about the same question generally (refer to table 7-7 in section 7.5.2). It appears that managers either overstate their capability to deal with work stress or their position affords them more control over the circumstances upon which they can act to reduce work pressures.

Table 7-12 Managers' personal experiences of work stress

My personal experience of work stress has been		
Answer options	Response %	Response count
Very positive	2.2%	1
Positive	15.6%	7
Neutral	28.9%	13
Negative	44.4%	20
Very negative	8.9%	4
	<i>answered question</i>	45
	<i>missing data</i>	3

Twenty-eight survey participants responded to the invitation to provide free text comments to describe what they believed were the causes of work stress, if experienced personally. Overwhelmingly, 26 (93%) listed only a work factor or work relationship as the causes of their own stress. Examples of these causes covering the most common factors were: *increased amount of workload; professional interactions and peaks of workload; lack of support from managers; upward bullying and poorly managed organisation; and bullying behaviours of*

senior managers. Only two respondents (7%) referred to their own personal issues as a contributing cause. Both reported their own personal issues/ vulnerabilities as part of the overall cause. Their abbreviated responses were: *a combination of circumstances including personal vulnerabilities; and high levels of stress occur when at the same time work/ personal/ and family perspectives become overwhelming*. This result contrasts with only 9% of the same managers' group identifying the definition of work stress as something in the environment (refer to table 7-9).

7.5.5 Causality and work stress

The beliefs about what causes work stress are closely linked to defining concepts. Thus the lack of precision in its definition was expected to be also reflected in the responses to the questions about causality. The survey question designed to detect these beliefs was expressed by ranking four groups of causes: two factors related to work (work design and environment) and two related to the individual. The examples of work design factors included in the questions were: workload and work pace. The work environment factor included an example of interpersonal relationships, (Cox & Griffiths, 2010). The two individual factors were personality and personal issues. The order in which these options were presented in the survey was randomised. The respondents were asked to rank these causes in order of their significance. Responses to this question are presented in table 7-13 below.

Table 7-13 Ranked responses in relation to causes of work stress

Rank the following causes of work stress in order of their significance, in your view						
Causes options	Top rank cause	2nd rank cause	3rd rank cause	4th rank cause	Rating average ¹	Response count
Work design factors such as workload and work pace	15	5	14	8	2.64	42
Work environment factors such as interpersonal relationships	13	15	10	6	2.80	44
Individual personality factors	10	9	12	10	2.46	41
Individual personal issues	6	13	6	17	2.19	42
<i>answered question</i>						44
<i>missing data</i>						4

Note: Rating averages were calculated by allocated ordinal numbers, with top rank = 4, second rank = 3, third rank = 2 and fourth rank = 1

Since the question related to the cause of work stress and not personal stress, it could be expected that all of the first rank responses be directed to one of the two work-related factors. Thirty-six percent of first rank responses were in fact directed to either one of the two individual factors, with the personality attracting 23% and personal issues attracting 14% of the top rank responses. Sixty-four percent chose one of the work related factors as their top rank. Thus the predominant belief about the order of importance of such causes appears to be that work-related factors are more significant than individual factors.

The Friedman chi-square test was chosen for the initial statistical test of significance between these responses, since it is a non-parametric statistical test used for one-way repeated measures analysis of variance by rank, where multiple comparisons are used. Pearson's chi-square test was then used to complement the Friedman test to determine whether there were any significant differences within the items between the pairs of ranked factors (Agresti, 2007: 38).

The ranking differences between the four factors were found not to be statistically significant, with Friedman chi-squared = 5.1958, $df = 3$, $p = 0.158$. When the factors were reduced to two: work and individual, having combined the first two (work design and work environment) and the last two (personality and personal issues), the chi-squared test also showed no statistical significance (chi-squared = 0.9023, $df = 1$, $p = 0.3422$).

Each factor was then tested in pairs to determine any statistical significance in the way the participants ranked them. Pearson's chi-squared test with Yates' correction was used, yielding the results as shown in table 7-14 below. These results indicate that the participants had clearly chosen the individual–personal issues factor as the secondary cause to both work factors. However, statistically, they had not been able to decidedly rank any of the other three factors as the primary cause ahead of the others.

Table 7-14 Comparison of beliefs about work stress causes – Pearson’s chi-squared test between ranked pairs

Causes options	Work design	Work environment	Individual personality	Individual personal issues
Work design factors such as workload and work pace		6.052 p<0.109	2.507 p< 0.474	13.853 p<0.003
Work environment factors such as interpersonal relationships			2.971 p < 0.396	8.974 p<0.03
Individual personality factors				5.5308 p<0.137

Free text responses were invited and taken up by seven respondents, and they reflected this sense of being confounded by the difficulty of such ranking. A typical comment providing additional insight into the responding managers’ thinking about what causes work stress was about the difficulty they faced when making a forced choice of this kind, as exemplified by the following statements:

It is difficult to prioritise since, in my experience, the factors are mutually constitutive.

I would rank the above as all really important factors.

These are closely ranked, and I would say some of them have equal weighting for different individuals.

This was difficult to rank and I changed it a few times; all are significant and at different times they can change in their ranking.

Understandably, the task of ranking causes a complex phenomenon that can be best understood in the transaction between an external event and the individual’s appraisal can be expected to be taxing. As there are a number of contributing factors to the experience of work stress, it is of interest to understand the underlying beliefs of managers in terms of comparative contribution of the organisation compared to the individual. The significant finding here is that a large proportion of

managers (36%) identified the individual as contributing more significantly to the underlying cause of work stress experience than the organisation.

7.5.6 Responsibility for managing work stress

The beliefs about causality of work stress are closely related to those about whose responsibility it is to manage and prevent work stress. As figure 7-2 shows, the majority (72%) selected the organisation, when forced to choose between the organisation and the individual.

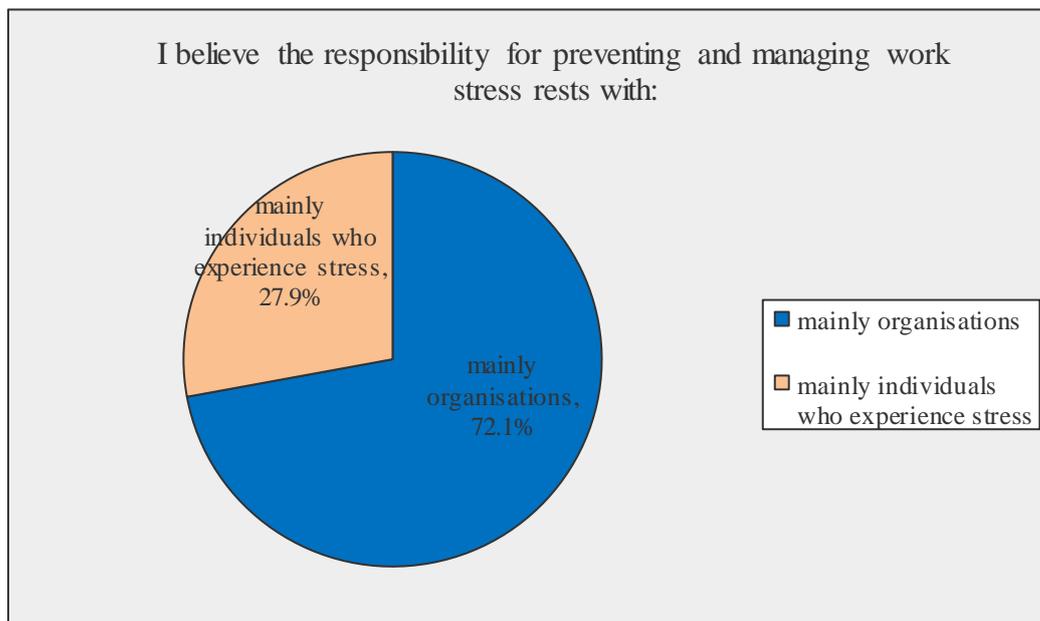


Figure 7-2 Beliefs about responsibility for preventing work stress

Twenty-three free text responses to this question provided some insight into the responding managers' struggle to make this choice, as most of their comments pointed to their belief that both (organisations and individuals) had equal responsibility. Some attempted to differentiate the legal (OHS duty of care) responsibility of the organisation from the actual/ practical responsibility of the individual. Comments that typify this dilemma that managers faced in articulating their beliefs are as follows:

It is not black and white. If an individual realised that the stress is coming from work but organisation cannot see it, it is up to individual to take responsibility and advise the organisation.

Legally I know this is our organisation's responsibility with the manager's hat on, I reckon it is actually the individual's responsibility.

Both equally/ It is a shared responsibility/ People themselves also have some responsibility.

Organisations provide support once the individual has decided what to do with it.

But it's the individual's reaction to the actions. OHS duty of care rests with the organisation.

Another group of comments provided insight into managers' beliefs about the lack of organisational capability to identify work stress. They pointed to the individual's responsibility to alert management so they in turn can take some action. Only two comments clearly acknowledged management's responsibility for work design, workload and relationship issues as they contemplated the answer to this question. These two examples articulated a clear conceptual basis that is needed as a minimum to enable the PsHS system to be applied to a workplace.

7.5.7 Beliefs about PsHS and OHS

Three questions were included in managers' surveys to ascertain their attitude to adopting the PsHS approach in managing work stress in their organisations:

- It is possible to manage work stress using the OHS system?
- Management of psychosocial health and safety is similar to management of physical health and safety
- I believe the risk management approach is effective in preventing or managing work stress.

The 6-point scale of 'Strongly Agree' to 'Strongly Disagree' was used and the response rates to each of the above questions are shown in figure 7-3 below. There are a number of striking patterns emerging from the analysis of responses to these

questions. Firstly, there is generally more agreement about these assertions, however it is not strong, with under 10% strongly agreeing with any of the statements. The biggest group of respondents are undecided, selecting the ‘somewhat’ option of either disagree or agree.

While there are about 40% agreeing (strongly agree or agree) that risk management is effective and that the management of psychological and physical health are similar, only about half as many (24%) believed that it is possible to manage work stress using a classical OHS system. There were many more ‘somewhat agreeing’ with this overarching statement. There was least disagreement about the effectiveness of risk management approach in its application to work stress management (none said they strongly disagreed and only 21% disagreed or somewhat disagreed with this statement).

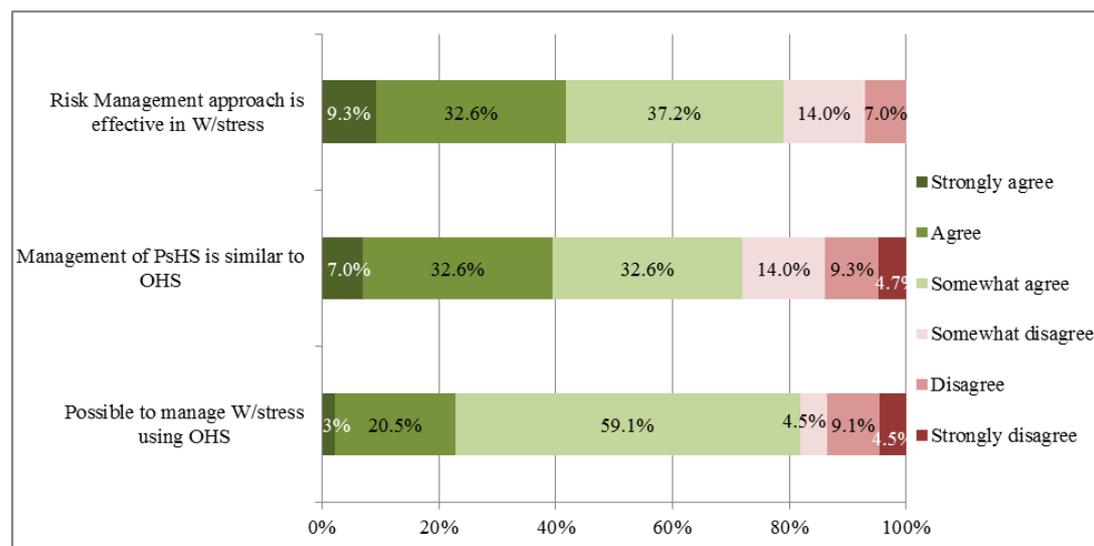


Figure 7-3 Summary of managers’ beliefs about PsHS

The above questions were also asked of HR practitioners and reported in Chapter 6. When their responses were compared with those of the managers (refer to table 7-15) it was not surprising to find that more HR practitioners believed risk management is effective and that it is possible to manage work stress using a systemic approach. However, this trend was reversed in the question relating to the similarity between PsHS and OHS systems, with more managers agreeing with this statement. These results point to the ambivalence among both groups with respect

to the application of systemic prevention. HR practitioners also are likely to have had more experience with the practice of these systems and hence were more sceptical about the application of OHS systems to managing psychological health.

Table 7-15 Comparison of managers' and HR practitioners' attitudes to PsHS and OHS systems

	% agree or strongly agree	
	Managers	HR practitioners
Risk management is effective in work stress prevention	41.9	59.3
Management of PsHS is similar to OHS system	39.6	25.0
It is possible to manage work stress using an OHS system	22.8	44.8

7.5.8 Theory of Planned Behaviour measures

In addition to the above attitudinal questions, additional variables contained in the Theory of Planned Behaviour (TPB) model were included in the survey (Ajzen, 1991). The TPB in this application was the managers' implementation of work stress systemic prevention. Its application to this behaviour is represented graphically in figure 7-4 below. The following variables were included in the survey:

- Subjective norms, assessed through a question relating to the manager's belief about their executives' expectations.
- Perceived behavioural control, expressed as skill to implement risk assessments.
- Intention to implement systemic work stress prevention (PsHS).

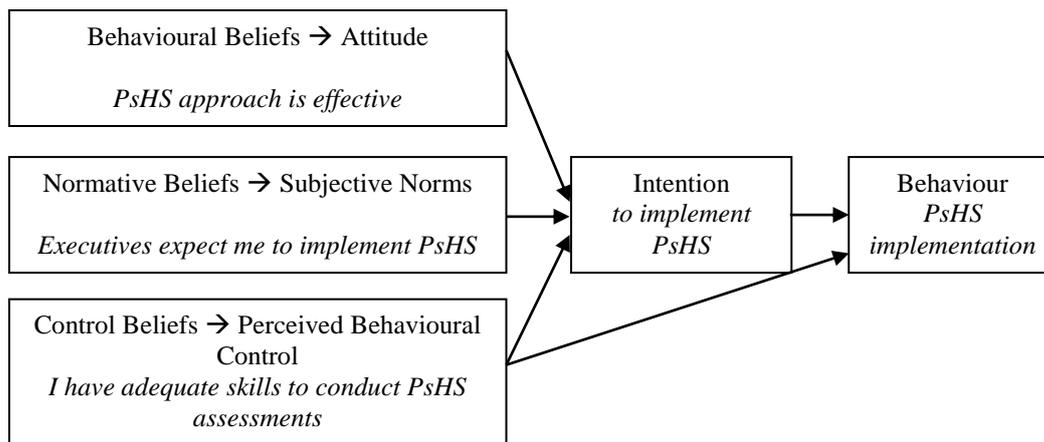


Figure 7-4 TPB applied to the implementation of psychosocial health and safety (adapted from Armitage & Conner, 2001)

The results of the questions relating to subjective norms (i.e. the belief that the manager's executives expect a systemic implementation of work stress prevention) show that only 32% believe that to be the case. Another 30% or so somewhat agree with it, and none believe it strongly (refer to figure 7-5 below). The belief about adequate skills measuring perceived controls over the implementation of PsHS was shown to be even weaker, with only 16% believing or strongly believing that they had adequate skills to perform work stress risk assessments.

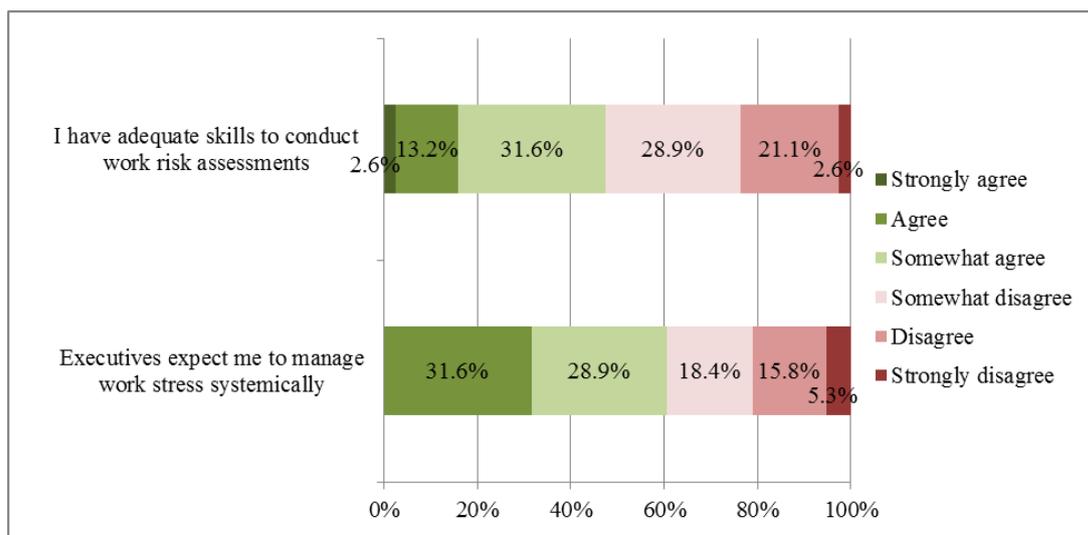


Figure 7-5 Managers' beliefs about perceived controls and subjective norms

The responses to the question about managers' intentions to implement work stress prevention are shown in figure 7-6 below.

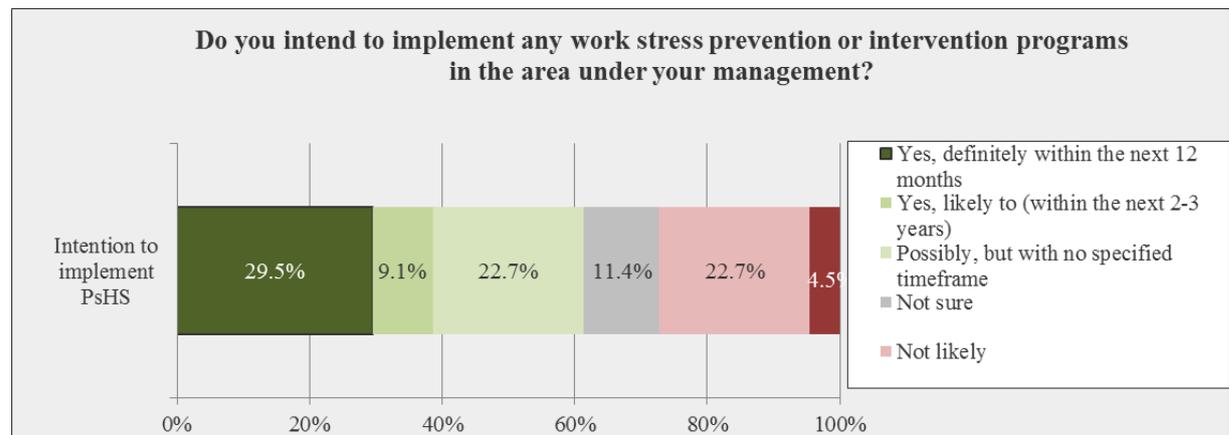


Figure 7-6 Intention of implementing work stress prevention

While on the surface the findings indicate that almost 40% of the respondents are either definitely or likely to implement prevention programs, when their more detailed free text responses were analysed, only 30% of those appeared to have clear plans for specific programs such as training or assessments. Others responded with general or non-specific statements such as: '*will follow common sense*', '*have discussions about it*', or '*make sure we have good team management*' as shown in table 7-16 below. Only two (or 5% of all respondents) reported they will undertake risk assessments, which form part of a systemic approach to dealing with work stress.

Table 7-16 Categories of detailed responses of managers who declared their intentions to implement any work stress prevention programs

Response category	Frequency	% Response
Risk assessments	2	12%
Mental health/ Resilience awareness/ training	3	18%
Informal monitoring of the workplace	5	29%
Non-specific steps (e.g. discussions / good team management)	5	29%
Unclear (e.g. common sense/ not a major issue)	2	12%
Total	17	100%

The managers' actual implementation behaviour was not studied in this research and the analysis extended to the correlations between the reported intention and other

variables. In addition to the TPB constructs (attitude, subjective norm and perceived control), the following variables' correlations with the intention were also investigated:

- gender of the respondent;
- belief about neutrality of work stress (positive, neutral, negative); and
- belief about causality of work stress (i.e. whether it was predominantly caused by work/ organisational aspects or individual / personal factors).

The means, standard deviations and intercorrelations between variables under consideration are presented in table 7-17 below.

Table 7-17 Correlation co-efficients, means and standard deviations of managers' work stress conceptualisations

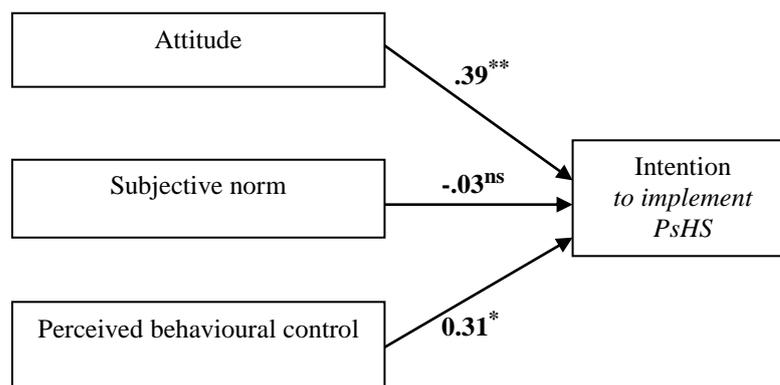
	Intention	Attitude	Norm	Control	Gender	Neutrality	Causality	M	S.D.
Intention	1.0	0.393*	0.095	0.301	-0.118	0.237	0.143	2.92	1.71
Attitude		1.0	-0.071	0.018	0.011	0.194	0.116	2.69	0.98
Norm			1.0	0.498*	0.039	-0.109	-0.118	3.36	1.24
Control				1.0	-0.117	0.122	-0.028	3.61	1.15
Gender					1.0	0.075	-0.161	1.47	0.50
Neutrality						1.0	0.037	2.08	0.43
Causality							1.0	1.25	0.44

As the table above shows, there appear to be generally weak correlations amongst the variables, with only two showing a significant correlation: between intention and attitude; and between perceived control and subjective norm.

The analysis of each variable was performed using structural equation modelling (SEM) via The R Foundation for Statistical Computing Platform, 2013, x86 software system. The SEM technique was chosen as it flexibly enables modelling of relationships among multiple predictor variables, latent variables and model errors in measurement as well as confirmatory analysis, (Chin, 1998). Model fit was determined by the chi-square test, comparative fit index (CFI), and root mean

square error of approximation (RMSEA). Path coefficients and R^2 were also calculated to evaluate the predictive power of the TPB model in this application. Sample size was considered to be smaller than ideally desired for SEM application; however, they were estimated to be within the lower acceptable bounds (greater than 10) as calculated using the function of the ratio of indicator to latent variables developed by Westland (2010).

The results of this analysis were as follows: chi-squared = 10.01 (6), $p=0.12$; CFI=0.70; RMSEA=0.140, indicating that the model does not strongly predict the intention of managers to implement work stress prevention programs. The regression analysis yielded $R^2 = 0.244$, with nine iterations, indicating that the amount of variance explained by this model is not statistically significant. The SEM coefficients are shown in figure 7-7 below.



* $p<.05$, ** $p<.01$, ns = not significant

Figure 7-7 The TPB model analysis for predicting managers' intentions to implement work stress prevention activity

While the TPB model has been shown to be weak in predicting the intention of managers' behaviour in this context, it appears from both SEM analysis and correlations that their attitude, defined by the belief that systemic prevention is effective, does have a significant link to their intention ($p<0.01$). Also, their perceived behavioural control expressed in terms of their belief that they have sufficient skills to conduct risk assessments was positively predicting their intention

($p < 0.01$). There was no significance found for the subjective norm variable in the model (i.e. their belief that executives expected managers to implement PsHS).

7.5.9 Extent of systemic work stress prevention

The managers were also asked questions about their observations and perceptions of the implementation of work stress programs in their organisations, which were similar to the HR survey. As figure 7-8 shows below, very similar and small proportions of both respondent groups (just over 9%) believed that their organisations were fulfilling this function systematically. More managers believed that their organisations did not do it at all (13.6% managers and 3.1% HR). A similar, overwhelming majority (73% managers and 84% HR) reported this function was either performed ad hoc or rarely.

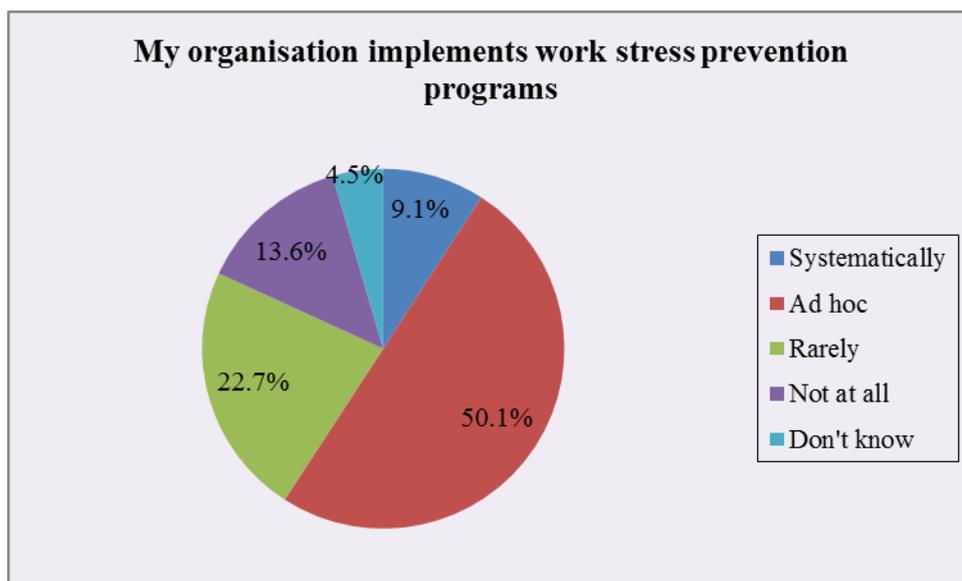


Figure 7-8 Proportions of managers reporting their organisations' implementation of work stress prevention programs

When the managers were asked whether their organisations implemented work stress preventions and to identify its components, 92% responded positively and 88% also responded to the specific questions to identify each individual component of such interventions. Their responses in relation to the identified components are summarised in figure 7-9 below.

Consultation with employees attracted the highest agreement from managers, with 60% agreeing or strongly agreeing that it takes place as part of the prevention initiatives, similar to HR representatives, of whom 79% reported likewise. This finding is consistent with the recommended practice of employee participation in risk management as well as with OHS regulatory obligations placed on employers to consult, whenever risk management activities are undertaken. However, it needs to be noted that involving employees is also consistent with the belief that work stress is an individual or personal issue.

The systemic components attracting the least agreement of the surveyed managers (under 40%), indicating that these are least likely to be implemented are data collection and analysis, documented review and evaluation and consultation with unions. These responses are consistent with the findings that there is little systematic prevention effort taking place. Ad hoc programs are more likely to be implemented, including employees' involvement and a documented policy, without the rigour of any metrics, reviews and evaluation.

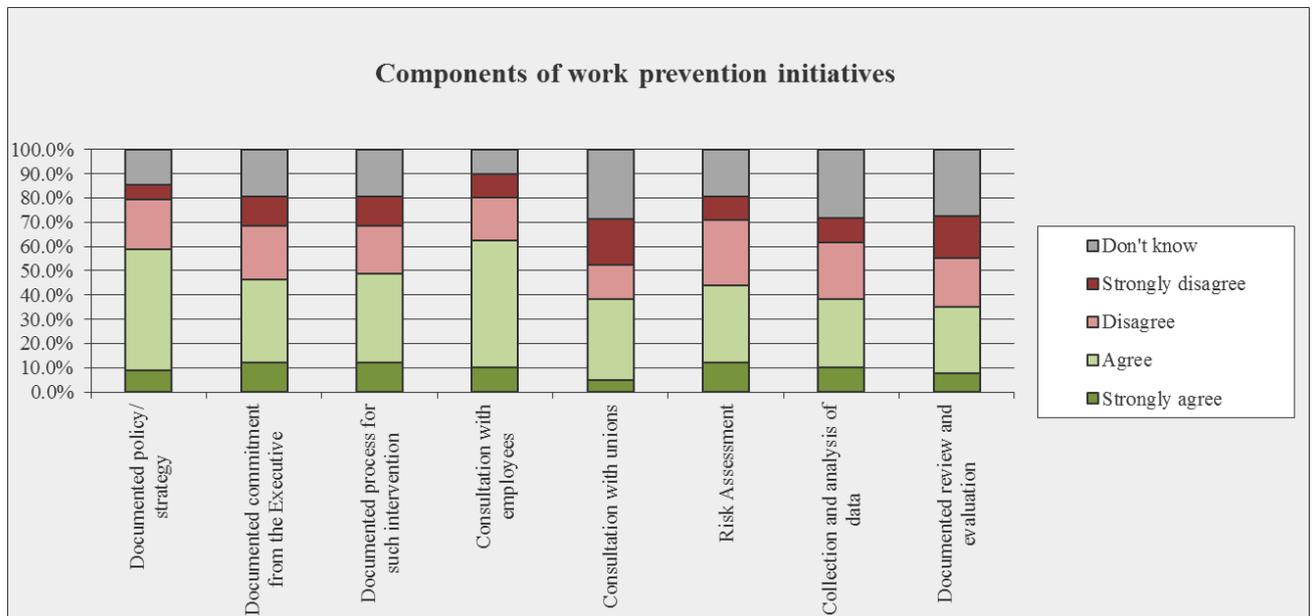


Figure 7-9 Components of work stress prevention initiative components reported by managers

When the responses (agree or strongly agree) obtained from managers were compared with those of HR representatives responding to the organisational survey,

an interesting pattern emerged, as shown in figure 7-10 below. There were fewer managers reporting the existence of all of the components, except that relating to the documented commitment from the Executive. It appears that managers significantly overestimate this component, since it is more likely that HR representatives, as responsible custodians of such policy documentation, would know of its existence. The greatest discrepancies were between HR and managers' views, with almost 20% more HR representatives reporting that consultation with employees, risk assessments and documented evaluations take place. It is interesting to note that consultation with employees was the highest element reported by both cohorts, and it is the only one mandated by most OHS legislations.

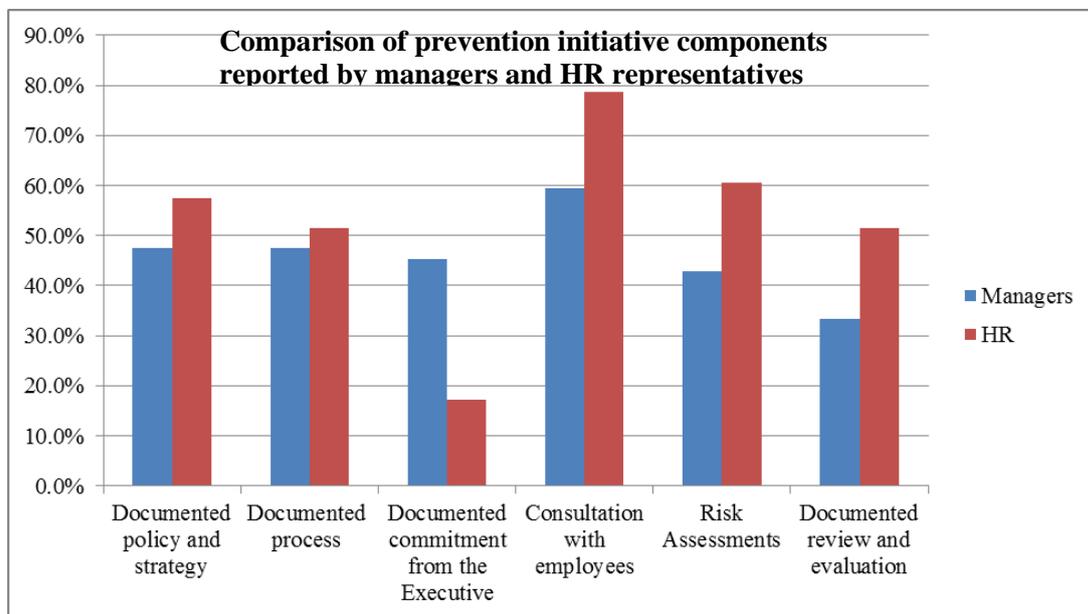


Figure 7-10 Comparison of work prevention initiative components reported by managers and HR representatives

Another element typically mandated by OHS legislation is the provision of training to employees as part of the overarching duty of care in order to ensure a risk-free workplace, so far as is practicable. If it was acknowledged that some training and awareness in the area of work stress provides a safer workplace in terms of psychosocial safety, it would be reasonable to assume that such training would be routinely provided. In practice, few managers and employees receive frequent training, as reported by the managers (4.5% for employees and 11.4% for managers), as shown in figure 7-11 below.

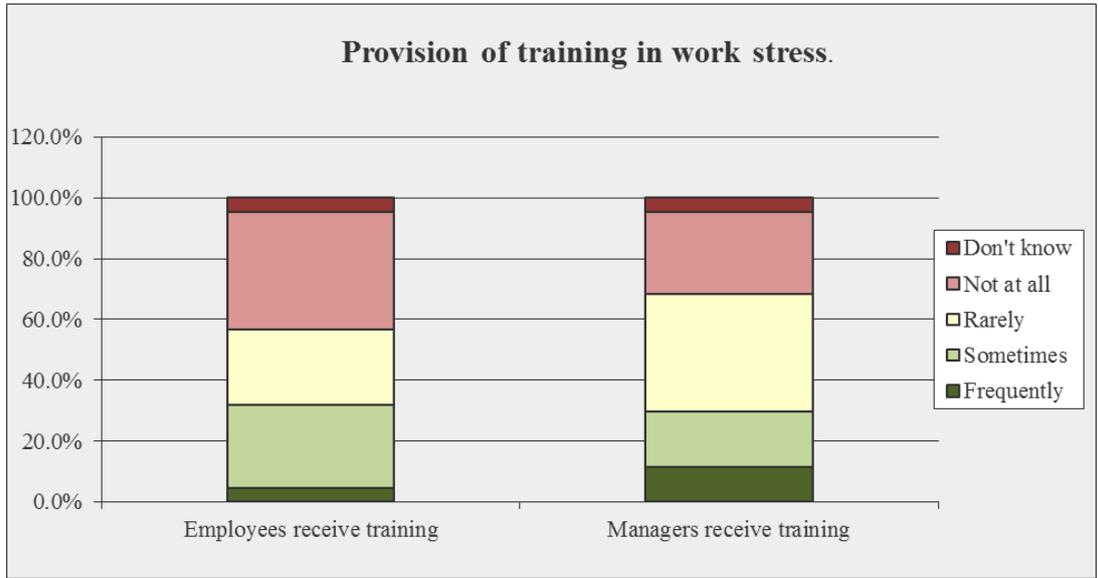


Figure 7-11 Managers’ views of proportions of organisations providing training to employees and managers in relation to work stress

One of the hallmarks of systemic intervention programs is the broad involvement of all the relevant organisational structures and effective communication amongst them. The managers were asked to respond to the question regarding the extent to which various departments were involved in such programs and the results are shown in figure 7-12 below. They indicate a low proportion of inter-departmental collaboration, with the OHS and HR units being the most likely to be involved and Finance least likely to be involved.

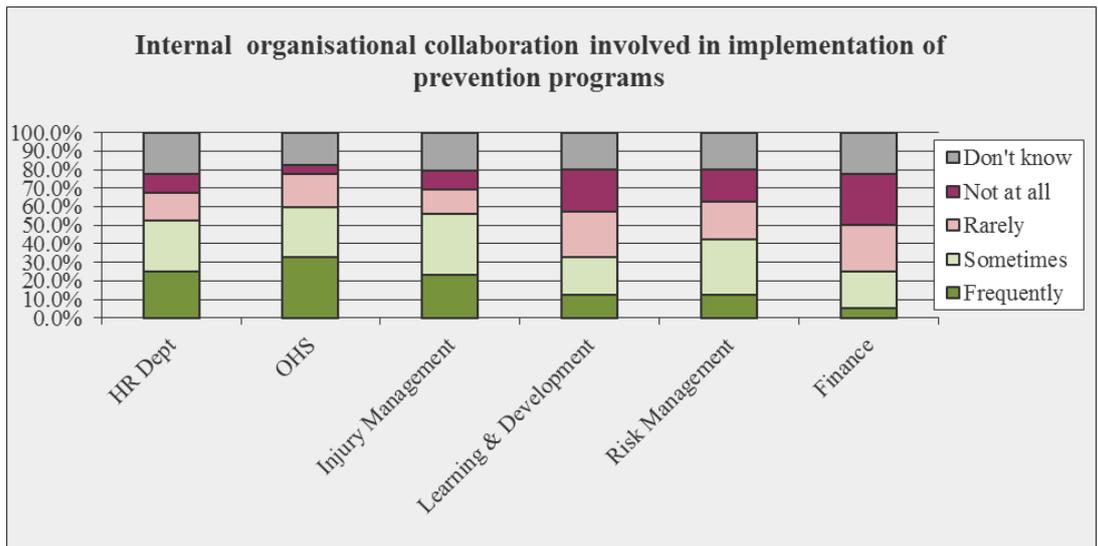


Figure 7-12 Extent to which organisational structures are involved in work stress prevention programs

7.5.10 Beliefs about most effective approach

Thirty-eight managers provided answers to an open-ended question about their beliefs about what constitutes the best approach to preventing and managing stress in the workplace. A clear majority of these responses were couched in terms of organisational factors (80%) as opposed to individual approaches. The most commonly cited work content aspect in these responses was workload expectations, followed by role clarity. Work context issues that were named included organisational culture, communication, relationship with managers, and leadership modelling values. Training and awareness were also reported by a significant proportion of the respondents.

It is of interest to note that a number of responses specifically referred to a systemic approach as being the most effective. A sample of various representations of this approach presented by the respondents is as follows: *Being clear about the causal factors and working with individuals and teams to manage these; to have a whole system approach that involves training and consistent approaches; recognition that it exists; consistency in approach; development of an ongoing program; funds allocated to continue the program; and make it visible, acknowledge it, measure it and factor it into WHS and Quality Management measures.*

When asked about the most convincing rationale for implementing work stress prevention programs, 63% of the responses mentioned an economic cost-saving element in their responses to what they believed was the most convincing rationale for implementing work stress prevention programs. A sample of such responses included, for example: *Aside from the fact that businesses have an obligation to look after their people it is of financial benefit through retention; decreased illness and absenteeism; time lost claims injury data and cost; economic argument – loss of productivity, increased claims, etc.; and adding value to business.* Most of these types of responses either included examples of data measuring the economic costs or proposed that some data be included as one of the main elements of such a rationale. The above examples typify how most of the respondents dealt with the

regulatory aspect of the argument for systemic stress prevention: it is mentioned in passing as an assumed minimum, rather than the key justification for taking action.

The second most common response (46%) referred to a positive aspect of prevention, including: *Happy staff*; and *stable staff and a culture of enabling staff to achieve their potential in the work force*. In particular, its positive impact on staff retention was particularly singled out by most comments, both in its positive and negative impacts, for example: *Risk that I lose good people and good performance – staff turnover. This would cause the organisation more stress; If this is done well then you will retain staff and have much better outcomes for clients*. Very few responses linked the issue to further organisational outcomes such as quality of service delivery or client service.

A number of responses recognised a multifaceted benefit and took a more holistic view outlining many cost-saving benefits, followed by productivity, health and cultural advantages. For example: *Data and contribution of less dollars to workers' compensation costs. Getting the best out of your people with optimum health. There is enormous under the surface costs related to the productivity issue. As people are dealing with stress they cannot be productive*. A few responses identified specifically improved communication and prevention of interpersonal conflicts.

Thus overall, there appears to be the following hierarchy of most compelling arguments reflecting the beliefs of managers about the potential effectiveness of systemic stress prevention, starting from the most salient which include:

- economic cost-saving benefits, measured specifically through people outcomes data such as workers' compensation, turnover and sick leave;
- economic improvement through increased productivity and better employee retention;
- development of healthy, happy workers, safer workplaces which are then linked to productivity;
- legal obligation; and
- ethical obligation.

7.5.11 Beliefs about barriers

The question addressing managers' beliefs about the main barriers to implementing systemic stress prevention programs in their organisations generated 30 responses and the categories of the emerging themes are presented in table 7-18 below. The barrier most often articulated was the lack of commitment from managers, closely followed by the lack of financial resources and inadequate knowledge of the issues.

Table 7-18 Barriers to systemic prevention programs identified by managers

Barrier theme	% mentions
Lack of commitment from managers/ low priority	26.7%
Money	20.0%
Inadequate knowledge of the issues	16.7%
Stigma/ fear of consequences	13.3%
Time	13.3%
Lack of acknowledgement as the organisational issue	13.3%
No data / lack of measurement	10.0%
None / unknown	6.7%
No specific compliance guides	3.3%

Examples of the responses encapsulating the beliefs relating to the top three categories were: *lack of commitment to a coherent approach and refusal to accept collective responsibility and systematic action; level of priority given to the issue; needs championing from senior management for it to flow through; people too busy being stressed to take time out to control it; time, money and commitment; denial that it exists as a problem; no measurement devices endorsed; and no guides or specific compliance requirements in place other than aspirational states.*

While the question was specifically addressing the barriers to a systematic approach, some the responses seemed to indicate that the managers were commenting on the deeper issues underpinning the lack of understanding of work stress in the first place, as exemplified by the following statements: *there is a stigma associated with stress issues – if you say you're stressed, you will be looked after, however this is admitting defeat and may negatively impact your career; and business is supposed to be busy, it's the nature of work, hence there will always be some stress, it's finding the correct level for each/every position and individual in the organisation.* These comments indicate that the respondents could not break through their

difficulty in conceptualising the work stress issue as an individual reaction that cannot be systemically managed.

7.6 Chapter discussion

Managers' surveys and interviews have provided additional data about their conceptualisation and their beliefs related to this concept as well as to their perceptions of how their organisations respond to its management and prevention. In general, both HR practitioners' and managers' views were aligned. The results, however, only partially coincided with those reported by other researchers in the past.

The overwhelming majority of managers perceive work stress as a negative concept, both in their direct survey responses and their free text responses to definitions of stress. However, the lack of clarity of their understanding of the concept of work stress was evident in their verbalisations of its definitions in the interview phase of the project. While they seemed to be cognisant of the neutrality of stress, depending on the context, they were far more likely to focus on its negative aspect. There was general agreement amongst managers that work stress has a deleterious effect on both physical and psychological health of employees as well as on the organisation's function. This finding points to the underlying confusion relating to the fundamental understanding of this complex concept, which has been perpetuated by popular education and information relating to stress as being potentially either negative or positive. While managers tend to hold the contextual variability and theoretical neutrality of this concept in their thinking, their practical experience of its negative impact prevails. This confusion, however, potentially plays a part in diffusing the focus from the need for work stress prevention, as it is manifestly unnecessary to prevent something that in some contexts can have a positive impact on organisational performance.

Another area of conceptual confusion that was revealed amongst the managers related to the nature of work stress, with most having difficulty in agreeing as to whether work stress relates to the individual's reaction, a stimulus in the environment or an interaction between these. The findings reported here were

consistent with those reported by Kinman and Jones (2005) but only to the extent that just under half believed it was best defined by an interaction between the individual and the environment. Other findings, however, revealed there was a discrepancy between free text definitions that were far more likely to offer the environment/ work factor in their definition, than when forced to choose it from the pre-defined list. When forced to choose the highest order meaning, managers displayed a greater propensity to reject work factors and focus on the individual reaction in their definition.

A discovery of some importance was made about the discrepancy between managers' beliefs between their own personal experiences of work stress and those relating to how it applies to others. A vast majority (over 90%) identified its cause for themselves to be a work factor or a work-related relationship. The same cohort, however, were far less likely to define stress in terms of external factors in the environment (9%).

It is proposed that the confusion surrounding the definitions and conceptualisation of work stress, in terms of its nature, neutrality and causality, is reflected in the responses by organisations to managing this phenomenon. Its low prioritisation as an organisational issue and preference for ad hoc programs, as a response to what is nevertheless perceived as a costly problem, exposes a deeper level of work stress belief as an issue that is too complex to understand and therefore to systematically manage. The manager survey results further indicated that the top barrier to systemic prevention is the lack of executive commitment. It is proposed that this is an outcome of an 'up-stream' issue of the lack of precise understanding of work stress. The issue of lack of awareness and knowledge about work stress in general was also agreed by both HR practitioners and managers as one of the top barriers to adopting PsHS in organisations.

The barriers identified to be the most significant to organisations implementing systemic prevention programs by managers were consistent with those offered by HR practitioners and with those reported by other researchers (e.g. Iavicoli *et al.*, 2011). Lack of knowledge and awareness about work stress, low commitment from executives leading to low prioritisation and lack of resources allocated to these

programs have emerged as consistent themes. Not surprisingly, managers did not offer the lack of regulations as one of the barriers. This contrasts with suggestions by academic researchers that lack of direct regulations is responsible for low level compliance with the voluntary code (Iavicoli *et al.*, 2011; Kortum, Leka & Cox, 2010).

This research confirmed some of the contradictions between managers' beliefs about work stress and their prevention behaviour (Dewe & O'Driscoll, 2002); however more complex relationships between stimulus-response conceptualisations of work stress were unlike those reported by Sharpley and Gardner (2001). While only a small proportion of managers in their study (3%) referred to stress as a combination of reactions and events (i.e. a stimulus-response relationship), this study found this proportion to be 42%, which was also consistent with the analysis of free text definitions offered by the managers. There were, however, other inconsistencies in managers' beliefs: they were far more likely to define work stress in terms of a stimulus in the work environment in their free text responses and were more likely to mention a stimulus (80%) than either an individual's reaction or an interaction between them.

This research found that more managers believed that organisations, rather than individual employees, were mainly responsible for managing and preventing work stress (72% and 23% respectively) although a number of them qualified their responses by saying that it was a shared responsibility. This result was in contrast to Dewe and O'Driscoll (2002), who reported that 51% of managers considered that the individual had either 'quite a lot' or 'total responsibility' for dealing with stress-related problems, even though most maintained the belief that employees had 'little' or 'no' control over the factors causing work stress. Thus they concluded that this finding concurred with the view that managers find secondary and tertiary intervention programs more appropriate strategies for dealing with work stress.

Dewe and O'Driscoll's (2002) conclusion was not completely upheld by this study's outcomes of direct probing of their managers' beliefs relating to the effectiveness of primary and systemic prevention programs. Some 40% of managers agreed that risk management is effective as a work prevention program

and that a system dealing with work stress is similar to an OHS system. About half as many, however, thought that it was possible to manage work stress using an OHS system. The proportion of HR practitioners agreeing that risk management is effective was even higher, at almost 60%. Also, when asked to describe the most effective approach to preventing work stress, a clear majority (80%) of managers expressed their opinions in terms of organisation factors as opposed to individual approaches.

The actual application of systemic work stress prevention, however, in spite of the beliefs held about its efficacy, was found to be similar to other findings (i.e. it is reported by a small minority of organisations). In this study, only 9% believed that their organisations prevented work stress systematically. An overwhelming majority (73% managers and, in comparison, 84% HR representatives) reported that this function was performed in an ad hoc manner or that it was rarely addressed.

A Theory of Planned Behaviour (TPB) postulating a causal relationship between attitudes and behaviour (Ajzen, 1991; Armitage & Conner, 2001) was applied to test managers' attitudes with respect to their intention to implement systemic prevention programs. This theoretical position has been found to apply to behaviours related to OHS (Harvey *et al.*, 2001). Attitudes to risk, safety and accidents have also been found to change through the provision of organisational interventions such as training (Lingard, 2002). The attitude to work stress systemic prevention was found to be correlated with the intention to implement such programs. Both the attitude and perception of behavioural control over the program, expressed in terms of managers' skills to conduct work stress risk assessments, were found to be statistically significantly linked to their intention.

The implication of this finding, in combination with the previously discussed poor understanding of work stress, is that the behaviour of implementing systemic programs can be potentially influenced through both awareness programs and targeted skills training of managers. This study reinforced the TPB links between attitude and perceived control; however, it has not found any evidence for the influence of subjective norms (expressed in terms of their belief that their executive's intention was to prevent work stress systemically) over their intention.

Further, the probability of implementing systemic prevention programs can be improved through applying the managers' opinions about the most compelling arguments. Their most frequently expressed suggestions contained economic and productivity improvement elements, followed by legal and ethical obligations.

7.7 Summary

This chapter explored managers' attitudes and beliefs about work stress through both interviews and surveys, following on from the previous chapter's focus on HR practitioners' views of the whole organisation response to managing this issue. The findings identified more precisely how managers conceptualise (or fail to conceptualise) work stress and how their beliefs influence their intentions and behaviours in implementing prevention programs. Additionally, this angle of enquiry provided another perspective on how organisations approach their work stress prevention responsibilities through managers' experience.

Barriers to the development of systemic approaches were identified through direct responses of managers to the survey and interview questions. The beliefs of managers, in relation to barriers and overcoming them, were explored through this data gathering methodology. The findings further confirmed that the majority initiatives in work stress organisational prevention are implemented in an ad hoc way, with very few claiming to do so systemically.

This chapter also utilised the conceptual framework of the Theory of Planned Behaviour (TPB) and provided evidence for its possible application to changing attitudes in relation to the PsHS. Key TPB elements were operationalised through the specifically designed survey questions and by using a structural equations method, their respective statistical significance for the model was obtained.

The next chapter engages case study methodology to provide an in-depth analysis of how organisations function as complex systems in responding to the recognition that work stress is a costly issue that demands their attention. Prior to describing the case studies, their units of analysis are identified. These were informed by the data gained from the study and described in this chapter.

8 Study 5: In-depth organisational experience – case studies

8.1 Introduction

The previous chapter explored the beliefs and attitudes of line managers to work stress and when it comes to implementing prevention programs. It addressed specifically the ways in which managers conceptualise work stress, its causality and responsibility for managing it. Managers' intentions to implement such programs were analysed within the Theory of Planned Behaviour (TPB) framework (Ajzen, 1991), to identify attitudinal and belief elements which influence their decisions. The barriers to any prevention activity, in particular a systemic program, were also identified directly from the survey responses of line managers.

This chapter explores further the barriers faced by organisations in adopting such prevention programs through case studies of three large organisations, which comprises Study 5. Each of them identified a need to conduct a stress prevention program, however, their drivers, approaches and outcomes were different. A systematic analysis of interviews, focus groups and observations is reported and conclusions are drawn about the organisational experiences in attempting such programs. These in-depth studies confirmed that managers' conceptualisations of work stress are instrumental in defining program objectives leading to lack of project clarity. Other barriers are also identified and each case study provides an insight as to why ad hoc approaches to PsHS prevail in Australia.

Prior to presenting these case studies of a state government department, a local government council and a health care organisation, a recapitulation of the methodology is presented.

8.2 Methodology for this Study

Case studies have been utilised as part of the research methodology in line with the principles of triangulation of data sources and to gain more in-depth understanding of why organisations do not implement systemic PsHS prevention, and how they are

currently approaching this area of legal and managerial responsibility. According to Yin (2009: 27), case studies are a useful research strategy when asking ‘why’ and ‘how’, and they need to consist of components such as:

- a study’s questions;
- its propositions;
- units of analysis;
- logic linking the data to the propositions; and
- the criteria for interpreting its findings.

The following types of case studies have been categorised by Stake (1995), and they are applicable to different purposes: an instrumental case study used to provide insight into an issue; an intrinsic case study whose purpose is to gain a deeper understanding of the case; and the collective case comprising of a number of cases designed to inquire into a particular phenomenon. Stake (1998) emphasised the importance of case being the object of study research rather than methods of investigation: “As a form of research, case study is defined by interest in individual cases, not by the methods of inquiry used” (1998:86). Yin (2009) placed greater focus on the techniques comprising a case study.

A general agreement amongst case study research experts is that a case should be a complex and contemporary functioning unit, a bounded system, and that it should be studied in its natural context, using multiple methods. Case studies can therefore be exploratory, descriptive, interpretive or explanatory (Miles & Huberman, 1994; Stake, 1995; Yin, 2009). While case studies are generally prospective there is some benefit in applying this method retrospectively, although it is most often used prospectively. Case study data emanate largely from documentation, archival records, interviews, direct observations, participant observation and physical artefacts (Yin, 2009).

8.3 Selection of cases

Three organisations involved in the implementation of work stress prevention were selected for case study analysis. Each of them was a government and/or human service organisation operating in Victoria, thus potentially subject to WorkSafe

Victoria guidelines issued under its OHS legislative authority. All organisations were a substantial size (over 1000 employees) and thus had significant resources dedicated to the administration of people management / human resources. The organisations included a state government department, a local government council and a health care organisation (public hospital).

Each organisation initiated a project related to work stress prevention and either directly or indirectly to the need for compliance with legal requirements. The data collected and analysed in these case studies comprised:

- interviews with the stakeholders in each project, including decision makers, commissioning parties, and HR management, (including the study co-ordinators; HR managers, OHS advisors, the CEO and OHS Managers). Conversations were extensively recorded in written format at the time of the interviews;
- people outcome data analysis;
- reviews of policy and procedure documentation;
- observations of focus groups involving employees and managers; Focus groups were conducted in two cases with voluntary participation in response to the invitation issued by the HR departments.
- observations of training program delivery;
- reviews of training program evaluation; and
- follow-up interviews with key stakeholders.

The cases in this research comprised the organisations implementing the work stress prevention projects. In order to answer the stated research questions, there were two levels of analysis undertaken: organisational dynamics and the PsHS system. The units of analysis at the organisational level included:

- project drivers and key objectives;
- involved parties, their roles, relationships and communication;
- project scope and delivery; and
- project outcomes.

At the PsHS level, the units of analysis were consistent with elements considered to comprise an effective system that were distilled from the research literature (reported in Chapter 2), and used in the surveys (reported in Chapters 6 and 7). They included:

- executive commitment;
- policy, strategy and process documentation;
- consultation with employees;
- risk assessment;
- participation of other organisational units;
- integration with OHS system; and
- review and evaluation.

It is recognised that the research writer was also in a consulting relationship with the respondent. This is, at once, both an advantage and a drawback. The advantage is that the engagement had the benefit of an existing good relationship with access to parts of the organisation that would otherwise be denied. The disadvantage is a possible compromise of objectivity and conflict of interest. With respect to possible conflict of interest, this was managed by disclosing to each organisation the intention to utilise the data for research purposes and seek their agreement. Each organisation had no objection on the proviso that their entities would not be disclosed and they be provided with a copy of the research findings. The involvement of the research writer as a consultant did not influence case study outcomes.

8.4 Case 1 – State government department

8.4.1 Organisation

The organisation has over 10,000 staff located throughout Victoria. The organisational divisions selected for the project were located in rural and regional areas. The mission of these divisions is best described as the provision of direct health and community services. The number of employees in each divisional unit in each region ranged from 500 to 800. The management structure could be described as a modern, ‘flattened’ hierarchy with a team leader responsible for approximately

10 to 15 staff, with about 4 to 6 teams forming unit clusters managed by a cluster manager responsible to the area manager in each division, who in turn responded to the regional manager.

The role of the organisational unit driving and co-ordinating the project was described as that of health, safety and wellbeing. This team was managed from the central office located in Melbourne, and it also had regional teams located in the centres where the project was being implemented. A team of consultants was appointed by the head office to assist with project implementation, with the focus being on coaching the local staff to enable them to continue performing a similar function on an ongoing basis.

Three rural areas were initially selected by the head office in consultation with regional management. Each regional team was then expected to select the local units for work stress prevention projects. As the project got underway, following the initial phase of training local project teams, one region chose to withdraw, stating that it did not have sufficient staffing resources to be able to commit to this project.

The project took place between November 2009 and June 2010. A follow-up interview was conducted with the central office co-ordinator approximately one year after project completion.

8.4.2 Project drivers and objectives

The ultimate project drivers were described by the department's project brief in terms of costs associated with work-related stress and its management and prevention being a high priority as an OHS issue. It also referred to the need for compliance with the WorkSafe Victoria guidelines issued under its OHS regulatory framework and international research by UK's Health and Safety Executive, demonstrating that this approach is an effective way to address work-related stress factors.

While the ultimate drivers were to reduce the number of stress related WorkCover claims and related costs, the immediate project objectives were listed as follows:

- assist work health and human resources staff in undertaking a work-related stress prevention program using a risk management approach; and
- equip them to support the prevention of work-related stress through coaching and support to managers to undertake risk management within regional work groups.

Thus key project components were the transfer of skills to work health and human resources staff in the selected regions through training, coaching, support and assistance while at the same time undertaking a work stress prevention initiative. The underlying assumption was that the local work health and wellbeing teams continue to implement stress prevention projects throughout their regions, having increased their capability and confidence.

8.4.3 Involved parties

The central office of the Work Health and Wellbeing unit allocated staff and budget resources for: internal project co-ordination, external consulting and coaching. This team comprised two to three staff with various qualifications in an OHS- related discipline, and while the executive board authorised the budget expenditure, in effect this team acted as the commissioning party for the project. The regional teams were self-selected, that is, those who volunteered to be involved in the project were included in the implementation team. They comprised two staff in one region and three in the other, most with administrative experience and few with any formal qualifications. All of them expressed the desire to gain more skills in the area of work stress prevention and psychosocial risk management, however, lacking confidence and experience in this area. One of the five staff was temporarily seconded from another government department.

The area managers were involved in the project and they were engaged by local OHS staff in the selection of specific teams for participation in work stress prevention, planning project activities as well as decision making and action planning following risk assessment. All three management levels (area managers, cluster managers and team leaders) as well as staff were involved in risk assessment activities.

A team of three consultants were also involved in the project, providing coaching, training and advice, according to the brief prepared by the central office. They maintained direct contact with regional teams and provided regular reports to head office.

8.4.4 Project scope and delivery

The intervention project commenced with the initial combined one-day training workshop for all staff involved in the project including the central office and staff from each participating region. The key learning objective of the workshop was to familiarise participants with the risk management approach as it applies to work-related stress prevention, following the framework produced by the organisation. It assumed, however, that the participants were already competent in general OHS risk management. It also included facilitation skills and the initiation of the project including introductory planning, introduction of all parties and agreed action plan.

In all regions, the next steps involved data analysis by local OHS staff which included stress injury claims, and claims of inappropriate behaviour on the basis of which they selected the organisational units for work stress intervention. They engaged local area tier managers at a face-to-face briefing during which they introduced the project background (utilising the handout developed by the head office staff), objectives, risk management approach and gained the managers' agreement and commitment to proceed. It also provided an opportunity to gain the managers' perspective on key issues facing the teams and their context.

There were two organisational units selected in each of the two regions proceeding with the project. Three of the four units agreed to conduct a survey on wellbeing at work, based on the WorkCover guidelines and its internal policy document. The survey results formed one source of staff input into hazard identification and risk analysis. The logistics of the survey distribution were managed by local team leaders. Staff members were advised that the survey was anonymous and to return the completed questionnaires to the regional OHS office managing survey collection and analysis.

The next stages of the intervention project included two staff consultation workshops organised by local team leaders and facilitated jointly by the consultants and regional OHS staff, held at a different venue from their normal workplaces. The workshops generally followed the agenda of discussing the survey results (where available), and identifying the relevant psychosocial hazards on the basis of a work-related stress hazard checklist. The participants assessed the risks of the selected hazards by discussing them and/or by placing their votes on a whiteboard. The combined list of the issues considered by staff to be the highest contributors to work-related stress was then generated and discussed in more detail. Possible risk controls (suggested actions) were also generated through staff discussion.

The facilitation team met prior to the workshop to discuss the survey results and plan their approach, and afterwards to reflect on staff consultation experiences. These sessions were also used for coaching purposes and to transfer skills from consultants to OHS staff, some of whom had little facilitation experience and expressed their lack of confidence in conducting such meetings/ focus groups.

Regional OHS facilitators documented the agreed list of hazards and preliminary action plan and passed them on to the team leader for distribution to staff. Further feedback and input from staff was invited. The document was also distributed to the managers for their consideration prior to the next workshop. The managers were also verbally briefed after the staff workshop by the facilitators. Input from the managers was planned to be formally sought at a meeting with OHS facilitators and management team prior to the second staff consultation workshop.

OHS facilitators reported that the meetings were often not attended by all the relevant tiers of management, usually with at least one being absent or represented by a proxy, who often had little project knowledge or handover. Importantly, managers discussed their priority list for the action plan and their budgetary implications so they could present to staff, at the following workshop, their united response to the items proposed by staff.

The commonly expressed issue with process was the lack of continuity amongst staff attending workshops. A number of staff workshops needed to be rescheduled due to staff absences and/or their inability to attend because of operational reasons. The amount of time available during the workshops for discussions about hazards, their risks and controls was also found not to be adequate in most areas.

8.4.5 Project outcomes

The project delivered on the objectives of increasing skills of local work health, safety and wellbeing to staff in the area of managing a work stress prevention/intervention project. Four organisational units also participated in these projects and had assessed their work stress risks resulting in local risk control/ action plans approved by their management for implementation.

To assess the outcomes and learn from this project for future applications, there was a review forum organised for all participants following project completion. It involved a systematic group reflection of ‘what worked well’ and ‘what was learnt during the project’ along the following dimensions:

- selection of units;
- management engagement;
- identification of hazards and risk assessment;
- staff consultation workshops:
 - Process
 - Facilitation
 - Involvement of managers;
- action planning; and
- plan implementation.

In preparation for the forum participants were asked to undertake the following actions:

- Prepare a brief (5 min) overview of the project in each work group as per point 4 of the agenda (Overview of the Project), to present to the group.

- Seek feedback from program managers involved using the following questions:
 - How helpful have you found this approach to managing work-related stress in this work group?
 - How satisfied were you with the level of communication you received about the project and your engagement?
 - What has been or will be put in place to ensure the agreed actions are implemented?
 - What further support will you need from HR to assist with implementation, if any?
 - Any other comments you would like to make to help us review and evaluate this project?

The reflections of participants are summarised below.

The selection of units did not present problems and although the selection criteria were not documented or exactly the same across regions, there was a general understanding that some teams were clear candidates, with longstanding issues well known to OHS staff and managers. The selection took place through informal discussion amongst the Work Health staff. As some organisational units may have hidden issues, which could pose unexpected problems for such an intervention, it was proposed that a risk assessment of some units undertaking the work stress risk management process may be useful prior to selecting them. For example, it was noted that the teams with challenging interpersonal dynamics may need a more interventionist approach in preference to the stress prevention and risk management framework. Similarly, issues relating to leadership behaviours were also recognised as challenging to tackle through the stress prevention risk management approach.

As the participants of the review forum reflected on their experience during this project, they made the following significant observations:

- The work stress risk management approach treats organisational issues as risk controls and yet they are much broader and seemingly fall outside of the OHS domain.

- There needs to be recognition of the pressure managers are experiencing in this process.
- Some managers may welcome adopting this approach as a management tool for problem solving.
- The level of management engagement in the process appears dependent on their style, level of trust and relationship with team members.
- Senior managers' early involvement in and support for the project is vital to its success.
- Staff workshop consultation processes were found to be useful tools in planning stress prevention, with the first workshop committed to hazard identification/ risk assessment and preliminary risk control/ action planning and the second workshop committed to finalising action plans with the involvement of managers.
- The preparation and briefing of managers prior to the second workshop was critical to successful completion and adoption of the plans.
- Risk assessment needs to be understood as a problem solving approach rather than a precise and objective process.
- A simple voting process was productive in identifying the top priority hazards linked to highest risks, according to staff perceptions.
- The initial wellbeing survey was useful to start the discussion and produce some quantification; however, it created difficulties in matching the hazard checklists with the survey results since the survey dimensions did not directly match the hazard checklists in the organisation's procedures.
- A need was recognised for more practical tools (e.g. a presentation pack, or pre-reading materials) for staff attending consultation workshops and for managers.
- While the duration of the workshop may have appeared to be a limitation, 3.5 hours was considered adequate to achieve tasks.

The OHS staff involved in the project reported they have gained skills in work stress risk management facilitation and felt capable to apply them to other workplaces. In fact, one team reported they have already applied their learning to another unit prior to the review forum.

However, they were aware of the ongoing need for development related to this area and when asked about further skills or resources they believed they required to successfully implement this process, they provided the following suggestions:

- facilitation skills (process design and techniques, specifically for facilitating in a tense/ hostile environment);
- ongoing access to coaching;
- local knowledge of program operation and environment;
- influencing others (e.g. with respect to managers) – communicating importance and generating interest; and
- increased awareness and accountability of managers in relation to work stress risk management of the areas under their responsibility.

The project's stated objectives to develop the skills of OHS and human resources staff to directly facilitate risk management activity, and to support line managers in the use of the risk management approach to stress prevention, were delivered through the formal training day, informal coaching and support during the project (face to face, by phone and/or email) and through practice of gained skills while participating in the project. When the participants were asked to rate their knowledge/ skill and level of confidence before and after their participation in this project, the average increase was reported to be of 0.9 and 0.6 respectively, on the scale of 1-5, as shown in figure 8-1.

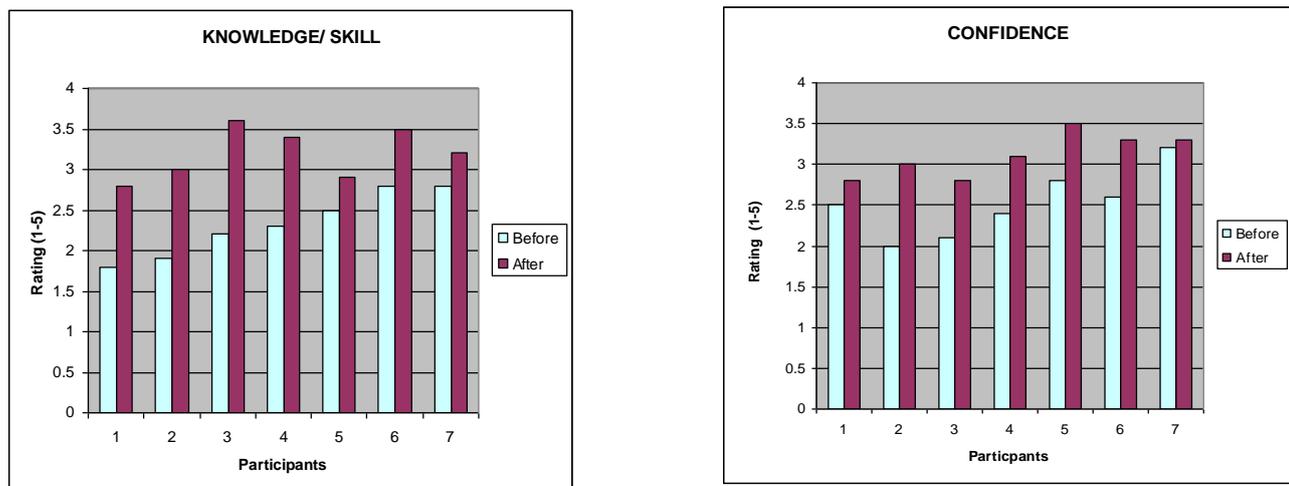


Figure 8-1 Participants' ratings of their knowledge/skill and confidence before and after their involvement in the project

In terms of action plan implementation, each organisational unit had a developed action plan based on a list of identified hazards, prioritised by the perceived level of risk. The proposed actions were initially treated as preliminary until authorised by senior managers, if they required their level of authority. Most action items were reported to fall into the category within the team leader's responsibility. The plans were distributed to managers and staff and were expected to be implemented within a period of three to 12 months. It was agreed that the implementation needed to be monitored and reviewed within six months to fully ascertain outcomes. It was proposed by the review forum participants that these plans be integrated into the normal operation of the units to ensure those committed to certain action items were kept accountable for their delivery. It was recognised that if these plans were discussed during team meetings, the identified hazard list could be updated on a regular basis. This could be achieved by ensuring that a standing OHS Agenda item included the monitoring of work stress risk control action items and monitoring of plans. When the review forum participants were asked to reflect on the implementation of plans thus far, they offered the following responses:

- *They have a potential to deliver improvements and savings.*
- *Too early to tell.*
- *Some action points stalled a few weeks after the workshop – it has to be revitalised.*
- *Where responsibilities are not defined, it has been less effective.*
- *Some ongoing actioning is necessary e.g. maintaining staff meetings.*
- *They should be built into the work stress risk management tool, including a reminder of action plans: e.g. Is it being worked? Is it a standing agenda item to review the plan?*
- *It needs to be more strongly defined as an OHS Agenda item.*

While the immediate outcomes of the project were achieved, they were limited to a few workplaces, and its implementation relied on the local managers' continuing to drive the process. The roll out of the prevention program in other organisational units was dependent on the skills of the regional OHS staff who gained new skills during the project. Follow up to this project, as part of the case study analysis (one

year after its completion), revealed that all of the OHS staff who were involved and had trained to undertake work stress risk management were no longer available to perform this function, as they either changed roles or had left the organisation. The interviews with central office staff also indicated there were few other initiatives of this kind and there was no ongoing program. Other work stress prevention programs are continuing in response to a high work stress risk identified in a particular workplace, but these programs rely either on external consultants' involvement or central office staff resources.

8.4.6 Elements of the PsHS system

The work stress prevention project as implemented in a large government department has been analysed below using the seven elements of a PsHS system.

Commitment from the executive

The commitment to work stress prevention was demonstrated at the highest level of the organisation through the formal policy and process documentation that accurately reflected OHS regulatory requirements. Resources were also allocated to pilot projects of the kind described in the above case study, which also demonstrated a certain level of recognition from the executive level that it was a mandatory requirement for the organisation. These resources were limited, however, to staffing resources within the OHS department who were given the task of co-ordinating this project in addition to their normal duties, and extra financial budget provided for the consultants' involvement for capacity building amongst regional staff.

Regional and area management levels more directly demonstrated their acknowledgment that work stress is a costly issue that required some action and commitment to the project through their direct involvement including attendance at project briefings and staff workshops. This management level also allocated additional budgets for staff relief during the consultation phase for the workplaces employing a roster system. The team leaders / supervisors were called upon particularly in this project to communicate with staff about the purpose, motivate them to participate, co-ordinate the consultation workshops and implement the

action plans. They were also expected to conduct similar processes on an ongoing basis through integration with team management.

It appeared that the continuation of work stress projects of this kind was compromised at a number of management levels, firstly by team leaders not adopting the processes as their day-to-day supervisory activity and secondly, at the cluster or area management level, not keeping them accountable for this activity. In addition, the regional HR and OHS advisors also did not maintain project momentum with ongoing communication and capacity building of their staff. The skill of managers was limited, during the project, to briefings by OHS staff as no other skill development was offered to them. The coaching program attended by a few regional specialist OHS staff was not continued or repeated and when the trained staff withdrew from their roles, their newly developed skills were not maintained.

Documentation

A number of documents were viewed and they comprised a comprehensive policy and process framework for work-related stress in line with WorkSafe Victoria 'Stresswise', published in May 2007, specifically for government and human service organisations. This framework includes the following documentation:

- work stress prevention policy, issued by a Wellbeing unit of the HR department, and including roles and responsibilities;
- work stress prevention policy guidelines, providing more details about the application of the policy and outlining roles and responsibilities in more detail; and
- work stress risk management guide for managers took a problem-solving approach to support prevention and early intervention. This document presented detailed process and procedure including various tools for collecting data and risk management activity. The process undertaken during the project described in this case study was based on this document.

Consultation

Union representatives were informed about the project; however, they were not directly involved, hence consultation took place at the local workplace level. This project demonstrated a thorough consultation process with staff, as well as all lines of management, which included initial communication about purpose and scope, an employee survey of wellbeing, and two staff workshops dedicated to identifying stress hazards and risk control planning. Staff input and feedback were sought in each set of draft minutes and action plans generated by the workshops. Team leaders also reported regularly on updating their team members on the progress of the project. OHS advisory staff were updating line managers and briefing them on the project progress.

While the level of consultation observed in this case was as thorough as could be envisaged, it is likely to have created an expectation that is not sustainable from the practical perspective of both time and cost investment in this sort of project. Thus this may have worked against it being replicated in other workplaces or rolled out across the organisation.

Risk assessment

Risk assessment took place at two levels: regional and local workplaces. The regional OHS team based their initial selection of the units on their own assessment of the level of risk, based on injury and compensation claim data as well as their experiences in providing assistance to them. The workplace level risk assessment included all the classical components of hazard identification, risk assessment and risk control action planning. Most of the teams also utilised a survey of staff wellbeing, enabling more data driven assessment of risk.

It was of interest to note the differences in the approaches to risk assessment demonstrated by different teams. Observations and interviews with OHS staff facilitators revealed the following experiences:

- *It was useful to know some theory gained from the initial training workshop and to share it with staff when introducing the concept of risk assessment.*

- *Using a checklist and limiting the participants to ticking up to three items was a more practical approach, given the time restrictions.*
- *One team divided into two groups for the assessment exercise to enable as many staff to have input as possible.*
- *Staff groups are not objective or skilled in assessing risks – they based it on feelings.*
- *It may be too demanding and counter-productive to teach everyone purist risk assessment process.*
- *Risk assessment was done by simply prioritising hazards in the workshop which was sufficiently effective for the purposes of this exercise.*
- *Strict risk assessment process in identifying risk levels was difficult.*
- *Survey was useful to start the discussion and have some objective numbers but created difficulties in matching two lists (from the survey and the hazard checklist) and producing too much data and complexity.*
- *Dots were successfully used to prioritise the checklist visually, followed by discussion of risk levels and meaning behind each identified hazard.*
- *Need to resolve the issue of risk assessment practically.*
- *Need more tools (e.g. a presentation pack).*
- *Staff and managers may benefit from pre-reading materials prior to consultation workshops.*
- *The more the team had to do themselves as part of the action planning, the more responsive and productive they were.*
- *Time duration was limited by practicalities of meeting times (i.e. 3.5 hours).*
- *There is a need to resolve the language of the consultation i.e. whether it should focus on (a) wellbeing as opposed to (b) work stress/risk or (c) organisational development.*

The discussions with project participants led to the development of a reconfigured work stress assessment and consultation process, which is reproduced in figure 8-2 below. Importantly, it shows the employee survey as being an optional part of the assessment and provides for an alternative one-to-one interview process, to be employed when interpersonal conflict is detected prior to consultation workshops.

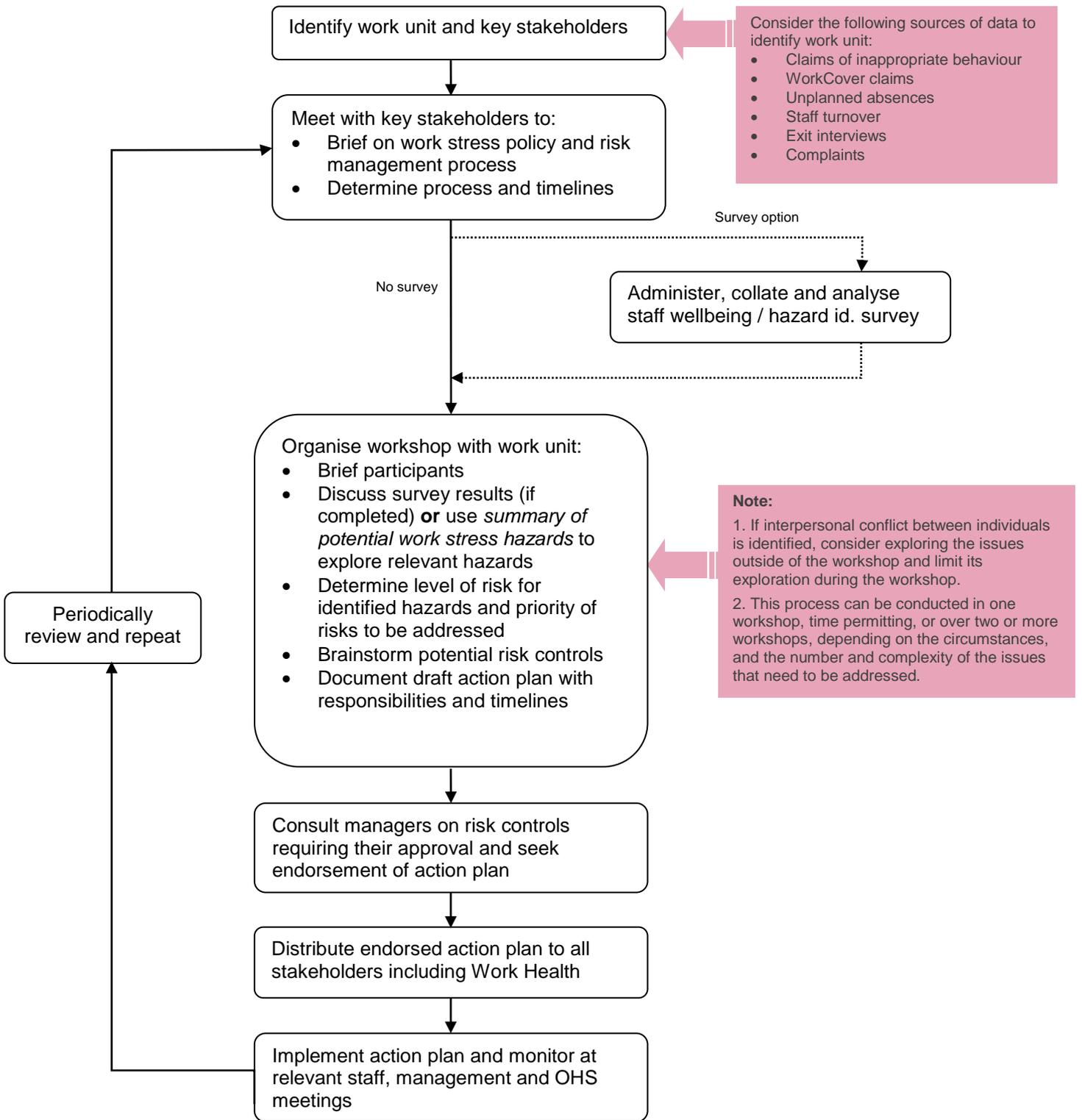


Figure 8-1 Stress prevention process drawn from the project participants' experiences and observations in Case Study 1

The overall preference was to simplify the risk assessment process which would be more easily replicable without needing to possess specialist skills and thus reducing the time dedicated to the prevention process. The group also proposed simplifying the language to that of a ‘problem solving’ approach rather than a risk based process.

Participation with other organisational units

The project was co-ordinated and managed by the wellbeing, health and safety unit of the HR branch within the People Service division. The central office staff specialised in work stress and wellbeing while those in the regional office had a greater focus on injury management. While they were referred to as OHS advisory staff, there were, in fact, other staff more directly engaged in traditional OHS activities. While all the staff in the regional OHS offices were aware of the project, it was limited to those directly participating in the project. There was no communication amongst the regional staff or any inter-disciplinary interaction, as the project did not appear to be owned by the regional office, but rather considered to be a central office initiative.

Given the significant size and skill resource of the organisation, there was little inter-departmental communication and collaboration. The project was limited to one branch and did not seem to have any visible input from units representing finance, corporate governance risk management, or even traditional OHS system management operatives. The focus of communication was on the collaborative relationship between the central office with the regional office managing wellbeing, health and safety. Since they were not in a direct line of management control relationship, with the local OHS office responding to the regional manager, they were relying on each other’s goodwill to participate in the project.

Line management at the regional level were fully involved in the project, but again, they did not initiate or own it, as they were playing the role of participants in the process as advised by the local OHS team. Despite documented policy and process being clearly directed to managers in title and language, they did not seem to be familiar with policy and relied on internal ‘specialists’ to lead the process.

Integration with OHS system

As demonstrated through a lack of collaboration with other internal staff, even within the department responsible for work, health and safety management, there was no evidence of integration between PsHS and OHS activities. Documented policy and process specifically dedicated to work stress prevention referenced OHS policy, however, it presented as a stand-alone set of documents. There was no evidence of integrating the processes of OHS hazard identification and risk controls with those under the work stress prevention.

As a result, on completion of the project, since the process did not include handing over the agreed action plans to any existing structure under the well-established OHS system, its implementation and monitoring was left up to the local line management, who did not seem to make the connection between their responsibilities for the physical and psychological health of their employees. The project appeared to be presented to management as a one-off process, which was so complex that they needed additional specialist skills and support. No efforts were made to integrate existing management or OHS processes during its conduct or following the completion of the project.

Evaluation

Evaluation of the project is described in project outcomes (see section 8.5.5). According to interviews with stakeholders, it was not carried out however at the workplace level, despite some plans having review steps included in the action plans. The process documentation (a guide for managers) included specific instructions for reviews during risk assessments: *‘It is critical that agreed expectations about monitoring and review are built into the action planning process.*

Key considerations include:

- *whether progress is being made on agreed actions in a timely manner to address priority risks, including risks directly managed within the team as well as risks which have been referred on*
- *keeping staff informed about progress*

- *whether actions implemented to address risks are effective, and whether any strategies should be revised to achieve better outcomes*
- *how improvements can be sustained*
- *how learning can be shared with others who may confront the same issues*
- *how new or emerging risks which need to be addressed can be captured.'*

None of these instructions were carried out once OHS staff ceased their involvement and handed over to individual team leaders. Area or regional line managers did not initiate such reviews, further signalling no ownership at line management level. And managers perceived the work stress prevention activity as being the responsibility of an advisory OHS and wellbeing unit rather than being embedded into the everyday people management role.

The project evaluation process revealed (through workshops and interviews) the following challenges experienced during the project:

- staff movement in management positions caused a lack of continuity of their involvement in the project;
- lack of availability of senior managers for briefings on work stress issues and project updates;
- team dynamics, including unresolved interpersonal relationship issues, needed careful planning and risk assessment prior to the workshops as well as careful management during the consultation process;
- lack of open communication and trust between staff and senior managers, most often due to lack of visibility and time pressures placed on the managers;
- Varying levels of communication with teams and leadership provided during the process;
- Level of resourcing and support required by the OHS staff in preparation and tailoring materials, arranging meetings with managers and teams, and writing up the outcomes of sessions; and
- varying expectations of staff from the work stress consultation process.

Participants concluded that work stress risk management is a useful process in problem solving and primary prevention of psychological injury in the workplace. Their collective view was that if the momentum built through this project was to be maintained through a roll out into other workplaces, it could further reduce WorkCover claims of mental health injury and inappropriate behaviours / bullying as well as producing a healthier work environment.

They offered the following suggestions for future improvement of the risk management process to enable its roll out in other workplaces, based on the experience gained from this project and subsequent reflections:

- develop selection criteria for teams to be involved in the work stress prevention process including an assessment of risks relating to the team's involvement;
- refine the risk management tool to include a facilitator's tool kit and presentation pack;
- equip facilitators with skills and confidence to deal sensitively with and challenge team perceptions of 'management' and managers' defensiveness;
- maintain availability of coaching / support for facilitators, and if provided through an external panel, ensure clarity of service provision, consistency and access to services;
- ensure there is a clear differentiation between other intervention approaches such as conflict resolution and case management;
- create opportunities to share knowledge about the work stress risk management across regions (e.g. through Work Health staff meetings);
- continually develop managers' awareness and skills in work stress risk management in the context of developing positive workplaces and overall leadership skills;
- consider integrating risk management with physical health and safety risk management and staff consultation processes; and
- simplify the process of estimating risk for each identified hazard, placing less emphasis on articulating the consequences of each hazard.

8.5 Case 2 – Local government council

8.5.1 Organisation

The organisation involved in the second case study was a local government council employing over 1200 staff. The project was initiated by the OHS and Wellbeing Branch of the Human Resources Department and co-ordinated by OHS Injury Management consultants within the same department in late 2010. The organisation had a typical local council structure, with the office supporting councillors and five divisions: Community and Health Services, Engineering and Urban Design, Regulatory Services, Commerce and Marketing and Corporate Services. The HR Department was located within the Corporate Services division.

8.5.2 Project drivers and objectives

The project dealing with work stress prevention was placed on the agenda by the OHS and Wellbeing branch, because council management recognised work stress prevention as a significant issue in terms of costs and risks to the organisation. Its management stated in their documentation that prevention needs to be given a high priority, and that they have already responded to this problem by initiating information sessions and programs including EAP, Mental First Aid, Managing Depression in the Workplace and Resilience Skills training available to all staff.

The HR Department stated that it recognised the need to lead in the development of a comprehensive work-related stress prevention and management strategy. Thus it commenced the consultation process with senior managers and staff through focus groups conducted in November 2010.

As part of the development of a business case to commence the prevention project, the following statistical data were collected and reported for the financial year 2009/10:

Table 8-1 People health outcome indicators collected in Case Study 2

People health outcome indicators	YTD measure for 2009-10
Absenteeism	2.77%
Lost time days due to WorkCover claims	113
OHS incidents	182

The ultimate objectives of the project were stated to reduce work stress related risks for the organisation and, as a result, to improve organisational health and wellbeing including decreasing and/ or eliminating the number of mental injury related WorkCover claims and lost time due to these claims.

Work stress prevention was approached from the organisational perspective and was not devolved to an individual workplace. While initial discussions of the driving parties included an organisational-wide awareness and skills training program, including the development of policies, its final scope was limited to generating documentation, that is, policy, process and tools for line managers. The final key outcomes of this project were stated as follows:

- develop a comprehensive strategy for preventing and managing work related stress issues, in consultation with all key stakeholders;
- equip line managers, through the provision of practical resources and tools, to proactively deal with work stress hazards, and resolve situations where individuals are contributing to stress and impacting on the team's wellbeing; and
- assist line managers and work health and human resources staff in implementing a work-related stress prevention and management program.

The scope of this prevention encompassed all aspects of work-related stress within the entire organisation, with a special emphasis on obtaining information from recognised high risk areas. This was achieved through OHS Wellbeing and Injury Management representatives identifying the units from which they invited focus group attendees.

While there was no explicit and direct link between this project and compliance with OHS legislation, the following principles were agreed to underpin the strategy development approach:

- policy framework needs to be consistent with the requirements of the Victorian *OHS Act 2004* with respect to the management of employees' psychological health;
- Taking proactive action to ensure a workplace that is free of harm to health through identifying and controlling 'stress hazards' ensures compliance with Section 21 of the OHS Act; and
- the consultation process involving input from management and staff in local work groups in controlling such hazards also meets the requirement of Section 35 of the OHS Act to consult with staff when managing risks.

8.5.3 Involved parties

The parties primarily involved in the design and co-ordination of the project were HR practitioners from OHS, Wellbeing and Injury Management units. While there was some discussion of the project, its scope and objectives within the senior management group, there was no visible evidence of the involvement of executive managers other than approval for departmental staff to attend focus groups and their availability for interviews.

The initial recommended design of the project was for the steering group comprising some executives and HR / OHS representatives to guide the project and thereby give it legitimacy amongst line management. This did not eventuate and the project continued to be co-ordinated by three to four individuals within the HR Department, without continuous involvement or clear direction from either the departmental manager or Executive.

8.5.4 Project scope and delivery

The main three phases of the project were data gathering from focus groups, the development of strategy and process documentation, and awareness / training sessions for managers.

Focus groups

Staff and managers from four departments were invited to attend focus groups to discuss stress issues relevant to their workplace by the HR, OHS and Injury Management Consultants. One department was not able to send participants and three departments which were involved represented Community Services, Business Systems and Parking and Traffic.

Twenty-six participants were involved in three focus groups. Each group was presented with questions to which they responded in a semi-structured format. The following four key questions were used in each group:

1. To what extent is work-related stress an issue in your department and workplace?
2. What are the most significant work-related stress risk factors?
3. What actions or risk controls are currently taken to manage and/or prevent work-related stress?
4. What else is needed to prevent and manage work-related stress better?

For practical purposes the first two questions were combined and responses were recorded together. In general, all participants were willing to contribute and communicated that the subject was of significant relevance to them. There was a variety of actions taking place at the local workplace level to tackle the issues already identified by management and staff. None of the departments, however, reported a systematic and proactive approach to preventing stress. Most of the actions have been planned as a reaction to issues that arise, believed to be linked to high levels of stress.

All of the participants readily identified work-related issues and offered immediate solutions, some of which were implemented at a local level while others had corporate implications. They were all aware of the organisation's initiatives in this area and offered more suggestions to improve the organisation's performance in this important area of corporate responsibility.

A universal view of all groups, offered at the beginning of workshops, was that work-related stress was a significant issue for both managers and staff. Generally there was an agreement that while some actions were being taken, there was a need for further awareness and strategies to tackle this issue. There was a commonly held belief that most causes of the stress were related to the individual rather than the organisation. At the same time, it was recognised that the organisation was responsible for taking proactive action to prevent and manage the workload, its structure and work environment.

The most common and immediately offered factor relating to work stress was related to workload, including:

- questioning whether it is reasonable in certain situations;
- clarity of workload expectations; and
- conflicting or unclear priorities which impact workload.

Other areas recognised as key stress hazards were:

- inappropriate behaviours, unresolved conflicts and the need for: modelling respect and other organisational values at all levels of the organisation, prompt actions to resolve issues as they are reported and consistent commitment to zero tolerance of disrespectful behaviours;
- change and the way its associated processes were managed and communicated; and
- unclear boundaries and decision making responsibilities amongst different departments.

A number of interventions and actions currently taking place were reported including:

- increased emphasis on informal communication and more frequent catch ups;
- regular debriefs and professional supervision;
- taking planned leave and ensuring others take it;
- health and wellbeing programs;
- support for employees both from internal structures and external providers;
- regular clarification about vision and purpose;

- good planning and increasing control of and input from staff, especially when introducing change;
- cultural improvement programs; and
- physical health promotion – organised group activities.

All of the participants agreed that while a number of initiatives for reducing work stress are being implemented, there is no systematic stress prevention program. They also identified a number of gaps which, if filled, could reduce risks further.

The following is a summary of key needs identified by focus group participants:

- obtaining and reporting a benchmark of the organisation's psychological health;
- building an organisational culture marked by support, not focused on blame, positive behaviours and high performance;
- develop greater skills in dealing with mental health issues – all participants called for this skill development to be compulsory and included in team leaders' induction programs;
- provide tools for preventing work-related stress;
- provide tools for managers to recognise stress and manage situations where poor behaviour or performance are involved;
- build more effective conflict resolution processes;
- provide specific skills in conducting difficult conversations for managers and staff;
- plan workload using more sophisticated tools;
- realign administrative and business support resources for different management levels with the actual demands or sizes of departments; and
- a review of the need for increased administrative and business support.

Documentation

Another significant element of the project was development of the organisation's first work stress set of documentation, which included reviewing a draft work stress policy and development of a strategy and procedure plus a work stress manager

resource kit including a guide for managers. This documentation had undergone a limited consultation process with feedback mainly received from HR practitioners. The resource kit included a work stress hazard checklist aligned with WorkSafe Victoria (2007a) guidelines.

The development of this documentation had undergone a number of different revisions, demonstrating unclear direction and philosophical framework underpinning the approach to work stress prevention. The early document requested by the organisation (through HR representatives) comprised a discussion paper for the executive management group to consider: to increase their awareness of work stress issues. This version was not utilised and instead a documentation of the focus group findings and analysis of work stress risks became the next focus. This document was also not utilised for the purpose of engaging senior management group members, with the focus then shifting to the development of a resource kit for managers. While the early version of this guide was solely concerned with work stress, the feedback from management led to the inclusion of major content relating to mental health awareness and tips for managing mental health in the workplace .

Awareness and training

Decision making with regard to the provision of awareness sessions and training for managers and the production of the resource kit was also uncertain, with a number of changes evolving throughout the process. While any new policy development was normally associated with a communication strategy, according to the interviewed HR practitioners, and the organisation having ‘a good learning culture’, as evidenced by 1189 attendances at 165 training workshops throughout the year, there appeared to be a reluctance to offer comprehensive skills training on this subject. The soft launch of this policy initiative consisted of:

- one briefing to ‘HR business partners’ (i.e. HR practitioners advising line managers on people management and industrial relations issues);
- one awareness session of one hour’s duration: the objectives were to present generic work stress information and best practice management strategies; and

- one lunchtime forum presented to staff, similarly couched in terms of general information about work stress, its sources and management in the workplace.

None of these training initiatives was specifically designed to launch the newly developed process and to present it as sanctioned by the organisation. There were no expectations of compliance with this process expressed through communication and the resource kit was not presented in any public forum. As the internal debate continued amongst the management team as to how to position this initiative, a further shift in the training initiative occurred with the decision to present a series of training sessions on managing mental health in the workplace, with no direct reference to the newly developed work stress prevention documentation.

8.5.5 Project outcomes

The project commenced with a specific objective to develop policy documentation to reduce the costs of work stress expressed in compensation claims. The first objective was delivered by the HR / Injury Management department in consultation with a sample of line managers. There was, however, very limited activity in launching this new policy initiative, with minimum training and awareness provided to staff and/or managers.

During the project, there were two significant staff departures, including the initial co-ordinator of the project and the HR management representative, who had championed the policy and promoted it to the senior management team. With changes in personnel responsible for the introduction of this policy, there appeared to be changes in decision making and tensions over the most appropriate method for implementing the policy. During the discussions between the HR representative and line managers, it became evident there was no clarity or agreement on the merits of the risk management approach to work stress prevention, or, in fact, on the language and definitions applied to this area. As an example of the confusion existing with the decision making group, a senior manager posed the following question: *'If stress is meant to be good at times, then to what extent should we prevent it?'* And another stated: *'We need to know what other organisations'*

benchmarks [there] are for sufficient stress because we wouldn't want to eliminate it altogether'.

The resulting uncertainty over the actual position of the organisation in relation to managing work stress and their lack of acceptance of the legal responsibility commensurate with OHS requirements, led to the policy essentially failing to be implemented. Further interviews with the organisation's HR representative one year following the completion of the project, indicated there was also no evaluation of the policy, despite the objectives having specific measures articulated in terms of the number of mental injury workers' compensation claims.

8.5.6 Elements of the PsHS system

As this project did not see the implementation of the work stress prevention program, despite its ambitious objectives on commencement, there was not sufficient data to analyse each element of the system that was developed. The following comments however can be made about each key element, from observations of project management and documentation:

- i. Commitment from the executive management was limited to their tacit approval for the project to go ahead provided to the HR department. As the communication of this project to the executive group was carried by the HR manager, who was not directly involved in the project, and relied on information provided by the OHS and Wellbeing staff, there was little clarity and detail. The project also attracted an insignificant budget and hence did not engage much discussion amongst key decision makers.

There was no process in the implementation of this initiative involving specific statements or signatures from the Chief Executive explicitly stating their commitment, as opposed to the OHS policy, which included such a statement.

- ii. Documentation of both the policy and detailed process was completed during the project; however, its awareness and therefore implementation was not able to be assessed.
- iii. Risk assessment process including consultation with employees was included in the policy documentation in line with the requirements of both

the *OHS Act 2004* (Vic) and WorkSafe Victoria guidelines. During one year of the existence of this documented process, there was no evidence, however, of it being applied in any of the workplaces of the organisation.

- iv. Participation with other organisational units was not observed during the life of the project. It appeared to be co-ordinated as an isolated activity by a few individuals within the HR department's units responsible for OHS, Wellbeing and Injury Management. As such, it is unlikely that the prevention system as documented, even if it was implemented, would see much collaboration amongst organisational units.
- v. Integration with the OHS system element was not included in the documentation other than cross-referencing the relevant policy documents. The observed conversations between various key parties during the project indicated that, in practice, it was unlikely that psychological and physical injury was to be managed in an integrated way.
- vi. Evaluation of the risk control plans was documented in the policy document in the 'continuous improvement' section, outlining monitoring and review steps. Since the project itself was not evaluated, it is also concluded that this element of the process, if implemented, was unlikely to be seen as important by the organisation.

8.6 Case 3 – A healthcare organisation

8.6.1 Organisation

The subject of the next case study was an organisation employing over 6000 staff, and located in over 20 major community health, rehabilitation and aged care sites. Six hundred staff were identified as having a people management role. The organisation experienced a high rate of growth over the last decade and was engaged in a building facilities' expansion program during the project. The structure of the organisation comprised six clinical service delivery units and a corporate support (planning and resources) unit, comprising another six subunits, two of which were related to people management: HR directorate and Education and Training. Within the HR department there were a number of sections including OHS and Injury Management. The project described and analysed in this case study

took place from mid-2012 to early 2013. It was initiated by the OHS manager through initial discussions with the HR director.

8.6.2 Project drivers and objectives

The key driver for the work stress prevention program in this organisation was initially expressed in various project related documents in terms of the cost of ‘psychological claims’ which were recognised as a ‘significant driver of workers’ compensation premium’. It was noted by management that although psychological claims are lower in number, they account for over a quarter of the total claim costs, which are considerably higher than other injuries as they tend to involve longer periods of time off work and higher medical, legal and other associated claim costs. Despite, this organisation reporting a 6% decrease in the number of psychological injury claims during the period 2010–2011, it also recorded the costs associated with psychological injury claims increasing by 33%. Management considered this scenario as ‘alarming’.

The analysis of compensation claims for psychological injury in past years, performed by OHS / Injury Management staff, showed there was an increase in the proportion of claims indicating ‘work pressure’ with workload backlogs and deadlines being the primary factors. Other factors identified as significant included organisational restructures, interpersonal conflict with peers and managers, and bullying and harassment.

As the project proceeded, however, key objectives expanded to ‘improving employees’ emotional wellbeing’ and ‘empowering staff and increasing engagement’ in addition to reducing the costs of compensation claims. It further expanded to encompass all ‘psychological costs’ which also included ‘reducing absenteeism and effectively managing presenteeism and poor attendance’. Despite these additional objectives, there were no other measures proposed as indicators of the project’s success other than psychological injury compensation claims. The project was funded by its workers’ compensation insurance agent.

As discussions between various key players in the HR department, particularly amongst OHS and Injury Management staff, continued prior to commencing this project, the outcomes appeared to have crystallised into a set of training initiatives believed to be practical and which tackled early intervention. A ‘strategic objective’ was to ‘implement early identification and practices that support practical intervention initiatives to improve employees’ emotional wellbeing and to reduce mental health symptoms and injuries’. The specific objective described as the ‘research objective’ was to ‘educate managers and staff to support their overall health and wellbeing’.

8.6.3 Involved parties

The project sponsor was the HR director and it was managed and co-ordinated by the OHS manager and staff. A steering committee was set up to oversee the management of the project. Its function was to

take responsibility for the business issues associated with the implementation of the Psychological Injury program across the various sites of the organisation. The steering committee was responsible for ensuring the outcomes are in line with applicable standards and legislation, that the program meets the organisational objectives and deliverables identified in the approved funding application and that the implementation is consistent with health organisations across the state.

The steering committee consisted of eight senior managers of the organisation and met monthly for approximately eight months during the main phase of the project. There were formal minutes taken during the meetings and distributed to all the members. One of the committee functions was to represent the project and consult with other significant parts of the organisation, including unions, the internal Mental Health department, OHS representatives, and the Nursing department, as well as external parties. The composition of the steering committee being limited to senior management levels was considered to be a limitation which contributed to the reduced effectiveness of the program, as it compromised the employee participation.

8.6.4 Project scope and delivery

The project was referred to as the ‘prevention and intervention of psychological injuries’. Its scope included all managers and staff of the organisation. The following phases were defined in the one of the project’s terms of reference, with the total timeframe being 17 weeks:

- research data on key influencing factors;
- procure subject matter experts (education providers);
- conduct training needs analysis;
- develop a marketing and communication strategy (for the training program);
- develop materials and online tools for further education and support with provider;
- run trial programs and measure the success including areas of improvement
- implement ongoing training for managers and staff and provide information in regular educational sessions; and
- evaluate processes and make recommendations for ongoing maintenance across the organisation.

While the project started with the research phase, its predetermined outcome by this plan was that the solutions needed were educational in nature. Further, the training audience was assumed to be all managers and the educational goals were expressed as ‘developing the skills for difficult conversations with staff about mental health and behaviour’. The research phase was undertaken nevertheless, and it included the following components: reviews of data (compensation, staff climate survey, and unplanned absences); interviews with six executives; and six focus groups separately for managers and staff in a number of locations.

Focus groups and interviews

There were two focus groups organised by the HR department through self-selection of managers, team leaders and staff from across two campuses. The managers and team leaders attended one group and staff attended a separate group. The focus groups and interviews included a number of structured questions to which responses were sought. These were discussed, recorded and presented to the steering

committee for consideration. The following is a high level summary of responses for each question:

Table 8-2 Summary of focus group responses

Question	Response summary
i. What are the things that you experience at your organisation that help promote positive health and wellbeing in staff?	<ul style="list-style-type: none"> • Communication • Leadership • Commitment to quality • Recognition • Social connections • Connections to community • Commitment to staff wellbeing
ii. What is your understanding of psychological injury / work stress?	
Conceptualisation	<ul style="list-style-type: none"> • It's contextual • Can see-saw • Stress is a bar that changes • Not a safe workplace • Physiological reactions • Confusion about whether it's positive or negative • People never refer to stress as a positive • Consistency in language is important • Stigma around language • If there is not enough pressure then it's also a negative because you're bored • Love-hate relationship with stress • For some it's natural to feel stressed and it could be motivating
Individual related	<ul style="list-style-type: none"> • Personal major events • Not talking things through and dealing with difficulties • Up to people how they handle things • Overlay between home and work affecting your resilience • Symptoms and consequences • People handle pressure differently – some thrive and some succumb • Some personality types are more inclined to get stressed • Different personalities
Workload related	<ul style="list-style-type: none"> • Unable to prioritise • Workload stress • Too much pressure

Question	Response summary
	<ul style="list-style-type: none"> • Being overwhelmed • When resources don't match your needs • Unrealistic workloads • Feeling swamped • <i>"Inability to say I am not coping with my workload as others appear to be coping."</i>
Workplace culture and relationships context	<ul style="list-style-type: none"> • Lack of support from managers • Negative relationships with people • Sick leave due to stress is a sensitive issue
iii. What do you believe causes work stress at your organisation?	<ul style="list-style-type: none"> • Individual factors • Interpersonal interactions / conflict • Job skills • Leadership • Communication • Workload • Resources • Work incidents • Work process • Organisational factors • Job insecurity • Lack of clarity • Change • Lack of fairness • Lack of effective support structures
iv. What could your organisation do in the way of prevention strategies?	<ul style="list-style-type: none"> • Work behaviour programs • Staff counselling program • Conflict resolution policies/ processes • Risk management process • Incident related • Training / Education / Health promotion • Leadership development • Work practices • Resource allocation • Team development • Communication (more effective, particularly for clinical co-ordinators) • Practical (e.g. more parking) • Policies/ Processes/ Practices

As the direction from the steering committee for this research was couched in terms of "training needs analysis" a question about possible inclusion in a training course was also asked and generated the responses shown in table 8-3.

Table 8-3 Responses to training needs related to work stress prevention

Accountable communication	<ul style="list-style-type: none"> • A range of conversations continuum • Examples – real-life scenarios
Change management	<ul style="list-style-type: none"> • How to manage change effectively • Coping with change
Culture	<ul style="list-style-type: none"> • How to develop a positive culture • Living the values
Leadership	<ul style="list-style-type: none"> • Performance management • People management • Providing effective feedback
Working effectively with others	<ul style="list-style-type: none"> • How to manage unhealthy conflict / conflict resolution • Understanding different styles • Dealing with challenging behaviour • Dealing with difficult personalities • How to have difficult conversations
Health and wellbeing	<ul style="list-style-type: none"> • Building resilience • Recognising and managing stress

While ‘difficult conversations’ featured in focus group discussions, it was not the most prominent theme. There were also other significant causes of work stress provided by staff, which could not be addressed by training. The participant’s suggestions were also broader than education. The data review also indicated that the two most prominent causal factors were traumatic work incidents and interpersonal behaviours, but particularly involving violent and challenging behaviours of patients toward staff. Irrespective of these findings, however, the predetermined training proceeded as planned and was authorised by the steering committee. It was clear from observed discussions that the risk management approach to work stress injury, in line with the OHS system, was an unfamiliar concept and there was no opportunity to raise member awareness of best practice.

Training

The training program was developed by external subject matter experts and a pilot was presented to selected staff including steering committee members. Following its evaluation, the program was updated and then delivered to approximately 400 managers over the subsequent three months. This training program became known as: ‘Building Healthy Workplaces – Prevention and Intervention of Psychological Injuries’ and was presented in half-day sessions.

The following is a summary of its content:

- i. Part One: What is the Issue?
 - Definition of psychological injury
 - Causation and risk factors
 - Data (impact to organisation: primary and secondary)
- ii. Part Two: Setting Expectations
 - Your role as manager
 - The importance of setting workplace expectations with staff (in relation to mental health and behaviour)
- iii. Part Three: Manager Toolkit
 - Identifying the risks
 - How to intervene in
 - Psychological distress issues
 - Behavioural issues
 - Performance issues.
- iv. Part Four: Tips for Building a Positive Workplace
 - How to best support employees and build a proactive work environment
 - How do you get the best out of your employees?
 - Tips for building strong and supportive relationships.

8.6.5 Project outcomes

The training program sessions were delivered to some 400 managers in groups of 15 to 20 during the three-month period. Overall the training program was co-ordinated

by the OHS department's staff member. Feedback from each session was obtained from participants and collated by the co-ordinator. The project, however, was not evaluated in its entirety using any of the measures it set out to achieve. Progress with training was reported to the steering committee at its final gathering as an accomplished project. There was a desire to complete the training roll out to all managers (approximately an additional 200), and to increase staff awareness of the difficult conversations that managers were expected to conduct, as an early intervention strategy and to demonstrate support. As there was no extra funding available, however, there was no further activity planned as part of this project at the time of the completion of this case study.

8.6.6 Elements of the PsHS system

Commitment from the Executive

The existence of the project steering committee, including a few director level executives, was a practical demonstration of some management commitment to the concept that was referred to as 'prevention of psychological injury'. The CEO was also interviewed during the project and verbally expressed his support for the project. There was, however, no other evidence of support for the development of a system or even policy or process documentation that would see ongoing integration of these objectives into the everyday business of the hospital.

Documentation and integration with OHS system

Despite discussing the need for greater clarity and documentation during the project, there was no attempt to develop any policies in relation to the prevention of work stress. There appeared to be no recognition amongst the OHS, Injury Management or HR staff, and similarly amongst steering committee members of the need for a separate policy for dealing PsHS. The OHS system was reasonably well developed; however, it made no specific references to psychological health. The extent of documentation resulting from the project was limited to training handouts, which included an escalation process for early intervention conversations with staff in relation to their mental health or inappropriate behaviour.

Consultation and risk assessment

The project involved consultation with staff and managers through a series of interviews and focus groups. This activity was not, however, conducted as an intentional component of a psychosocial risk assessment. Its purpose was ostensibly to seek input into the training program and its learning objectives were determined prior to the consultation process. There was no evidence of any risk assessment during the project or built into any activity related to the prevention of psychological injury.

Participation with other organisational units

The project was managed by OHS and Injury management teams, in close collaboration with the HR department. Connection with other organisational units was achieved mainly through the steering committee's involvement. There was no evidence of ongoing participation with other units as a systemic feature.

Evaluation

Evaluation was limited to the training program consisting of participant feedback obtained immediately after the training session. Informal evaluation was likely to have occurred by the Steering Committee who were charged with managing the project and had to report to the Executive on its progress. There were no observed attempts to comprehensively evaluate the project's objectives in measurable terms, despite having these set on commencement. It is likely that ongoing monitoring of workers' compensation and injury costs would occur in a similar manner to that which generated the driver for the project, through reporting of selected people outcomes and costs to the Executive. As the costs are observed to increase in the future, it is likely that another similar initiative will be undertaken, subject to available budgets for prevention.

8.7 Chapter discussion

All three case studies presented above commenced with acknowledged needs and objectives typically couched in terms of costs associated with some negative people outcomes. All of these included workers' compensation costs. None of them were driven by compliance with the legislative requirements and none succeeded in developing a systemic response to work stress or psychological injury problem.

This research utilised adaptive theory (Layder, 1998) to analyse the data from a number of sources, including case studies, described in this chapter. Adaptive theory allows the identification of emerging theory to inform the extant (or pre-existing) theory which forms the context of the investigation. The pre-existing theory of PsHS has built-in assumptions that the risk management framework applies equally to physical and psychological health. It also assumes a universal conceptual understanding of the causal relationships between psychosocial hazards and harm. This forms the context within which case studies were analysed, and predicts that the PsHS will not be adopted systemically in organisations if these assumptions are not supported. The case study data was examined in light of these theoretical underpinnings and an emerging theory was formulated (see Chapter 9).

The attempts of the organisation in Case Study 1 constituted the best example of a systemic initiative, which commenced with a vision to build the capacity of its advisory staff and line managers to enable its ongoing roll out throughout the organisation. Staff turnover and costs associated with the implementation go against the achievement of this objective, resulting in a short-term benefit. Despite a well organised and sophisticated conceptual understanding of the need for systemic work stress prevention and some budget allocated to its development, it did not result in an ongoing and sustainable system.

Organisations in cases 2 and 3 proved to have unclear or unfocused objectives, either too broad or too narrow to be effective in providing guidance to co-ordinating staff. Case 2 was limited to the development of documentation and Case 3 had a preconceived need for specific training content, disregarding the data collected during the consultation phase. There was an overwhelming conclusion from

observing decision makers (OHS/ Wellbeing staff in both cases and the steering committee in Case 3) that there was no conceptual clarity guiding their thinking as to what comprised effective prevention system. Since they did not accept the legislative OHS guidelines as being fully applicable to work stress or psychological health, they essentially improvised their approaches. Line managers depended on the OHS advisers' direction as they also had no other information to rely on.

Overall, the case studies provided further evidence that organisations adopt ad hoc approaches to managing their work stress prevention activity. And despite recognising the need, they do not apply the same rigour of system approaches to this area of people management responsibility as they do routinely to other OHS injury and illness management. There appears to be a conceptual disconnect between the two systems, as their observed project management behaviour as well as verbal exchanges indicate they do not believe there is compatibility between OHS and PsHS systems. Attempts to deal with the recognised need in the area of work stress prevention are constrained through limited budgetary commitments. Observations and data gained from the analysis of all three case studies have led to the emerging theory that managers' conceptualisation and perceptions of work stress need to be taken explicitly into account by the PsHS and organisational health frameworks.

In summary, the barriers to organisations adopting effective systemic approaches to work stress prevention as determined through the case study analysis include the following:

- lack of conceptual clarity about the meaning of work stress, effective prevention methods and legal employer obligations in this area;
- determination of the scope of PsHS projects aims being subject to the opinions and beliefs of the relatively low level advisory OHS/HR personnel;
- high turnover of staff, particularly in the OHS area, responsible for project management coupled with the fact that these initiatives are relegated to 'special' or one-off projects rather than being allocated to someone to manage them on an ongoing systematic basis;
- high turnover of management at all hierarchical levels with consequences being the lack of continuity and a large number of acting leaders;

- lack of skills and competencies in the area of psychological health amongst advisory OHS/HR staff;
- attempting to introduce overly complex approaches; and
- complex approaches to PsHS risk assessment and consultation phases proving to be too expensive for rostered environments.

8.8 Summary

This chapter provided further data relating to how organisations approach their work stress prevention responsibilities. The case study methodology was used to provide an in-depth analysis of the extent to which the systemic elements are present in those approaches. The units of analysis and criteria for interpreting the results were consistently followed in each of the three presented case studies. The results confirmed the findings from the surveys and interviews presented in earlier chapters (6 and 7), that the initiatives in the PsHS area are predominantly reactive and implemented in an ad hoc manner without a sophisticated conceptual framework guiding their decisions.

Barriers to the development of systemic approaches were identified through this case study analysis, providing additional data sources: staff and managers' input through focus groups, interviews, observations and document reviews. The beliefs of managers in decision-making roles were further explored through these analytical methods.

The next chapter collates the findings of this thesis presented in Chapters 4 to 8. It considers these findings in light of assumptions underpinning the PsHS within the conceptual frameworks of the Psychosocial Safety Climate and the Theory of Planned Behaviour and the international literature. It draws conclusions from these findings and discusses their implications for theory and practice in organisations and more broadly, the regulatory policy.

9 Discussion: Implications for systemic prevention and PsHS

9.1 Introduction

This thesis explored the barriers to organisations adopting systemic work stress prevention programs by generating and analysing five lines of enquiry. First, through a structured literature review of meta-analytic research of the effectiveness of work stress interventions (see Chapter 4) confirmed the fundamental assumption that the most effective approaches are systemic including both organisational and individual elements. Second, the thesis reviewed the regulatory framework applied to work stress prevention (see Chapter 5), there is an agreement in various OHS regulations Australia-wide that risk to psychological health is to be treated within the same framework as physical health, and yet there are practical differences in the application of these laws. Third, an original survey of organisational approaches to managing work stress (see Chapter 6), concluded that a vast majority do not adopt a systemic approach but rather do so through ad hoc programs. Fourth, managers' belief systems about work stress and their conceptualisations and attitudes were studied (see Chapter 7); a fundamental lack of clarity was discovered thus leading to low commitment to work stress prevention. Finally, three case studies were presented in Chapter 8, offering more in-depth analysis of the barriers to systemic prevention approaches through focus groups, interviews, observations and document reviews.

The aims of the study focused on the following three research questions:

1. To what extent have Australian organisations adopted systemic approaches to preventing workplace stress?
2. Where they are not adopted, what are the underlying reasons for their low uptake in terms of organisational systems and managers' belief systems?
3. What implications do these underlying factors have for underpinning theoretical assumptions, employers and regulators in the management of psychosocial health in the workplace?

Prior to tackling the research questions the following background factors were investigated in Studies 1 and 2 (Chapters 4 and 5):

- (a) Effectiveness of the current research supporting the claim that systemic prevention approaches are effective.
- (b) Legislative requirements and guidelines for managing and/or preventing work stress and management of their compliance by the OHS regulatory bodies.

This chapter discusses the findings beginning with a discussion about the extent to which systemic prevention has been adopted in Australian workplaces, drawing conclusions from the complementary evidence gathered in a series of five studies reported in this thesis (Chapters 4 to 8). It then proceeds to identify the barriers to their more widespread uptake, despite their reported effectiveness and regulatory regimes' intent. These underlying reasons are categorised and relate to organisational and regulatory systems.

Management attitudes and conceptualisations are discussed in light of the assumptions underpinning theories of work stress prevention and the regulations built from them. This chapter includes a discussion of how the theory behind PsHS is informed by the findings of the surveys, interviews and case studies presented in this thesis through adaptive theory (Layder, 1998) analysis. In particular, the differences between the psychological and physical aspects of health and safety systems and conceptualisations of work stress are discussed as the underlying factors ignored by current theoretical frameworks. It argues that the existing theory needs to be adapted by the emergent theory arising from this research. This chapter concludes with a discussion of implications of this research for policy and practice at both organisational and regulatory levels.

9.2 The extent of systemic stress prevention in Australia

Prior to tackling the first research question, two preliminary questions were answered. The first was whether stress prevention programs are effective and therefore make business sense for them to be implemented by organisations. The second was whether relevant legislative frameworks require that such programs be

implemented, which would lead to the expectation of some level of compliance with these requirements. These requirements would be expected to establish normative expectations of managers in organisations which lead to the key question: that if such programs are effective and if the regulatory regime anticipates the widespread establishment of such programs then why are these programs not routinely implemented?

The first question was answered in the affirmative through the study of meta-analyses reporting evaluations of work stress prevention programs. This study established that the effectiveness of work stress prevention is enhanced when systemic approaches are utilised (see Chapter 4, section 4.6), including both organisational and individual approaches as well as primary, secondary and tertiary elements of prevention. While there were fewer studies reporting long term and organisational effectiveness measures, the outcomes were sufficiently compelling for organisations to adopt, as a means of reducing economic costs of work stress, reducing the risk of injury and increasing the productive use of human resources.

Similarly, sufficient research evidence about what makes prevention programs effective has been available for governments to take action, and to fulfil their objectives of promoting health and reducing the burden of ill health in society as well as in occupational settings. Thus in line with international initiatives in the area of occupational health in the developed world and recognised emerging risks of work stress, legislative frameworks to encourage its prevention have been put in place by various regulatory bodies. The second assumption: that there are regulations in existence in Australia that require the implementation of some form of prevention in response to the OHS regulations, was confirmed through a comprehensive review of the legislative frameworks in all state and territory jurisdictions in Australia. While there was a universal inclusion of psychological aspects of occupational health within the OHS legislation, however, there were no specific and clear regulations governing employers' responses. This was identified as one of the barriers to adopting systemic prevention programs and as such, this is discussed in the next section.

The literature review reported in Chapter 4 demonstrated that there were few systemic prevention programs being reported by researchers. At best, such approaches represented about 27% of evaluation studies. Some researchers hypothesised that such programs could be implemented; however, they are not being evaluated or their evaluations are not being reported due to the sensitivities surrounding work stress in organisations (Caulfield *et al.*, 2004). It is more generally agreed that the paucity of robust evaluations is linked to their lack of adoption by organisations (Biron *et al.*, 2006; Nytrö *et al.*, 2000).

The evidence that organisations in Australia have not adopted systemic prevention programs was produced more directly in this thesis through the interviews and surveys of both HR representatives and senior line managers. To determine the extent of adoption of systemic prevention, they were questioned about the presence or absence of various system elements. While the presence of different systemic elements was reported at different levels, the estimates produced by this research are that a small proportion of less than 10% of organisations can claim to have a systemic approach for managing work stress (consistently reported by 9.4% of HR practitioners and 9.1% of line managers). While most organisations respond to the need to reduce risks and costs in this area (rather than comply with regulations), a vast majority do so in an ad hoc, reactive or programmatic manner rather than through a systems approach. This is in contrast to the response to managing physical injuries and illnesses which typically attracts close to 100% compliance with the OHS system. There were no organisations identified with a demonstrated integration of PsHS and OHS systems.

The evidence gathered through the interviews and surveys revealed the low level of prevention programs that could be described as truly systemic in nature. The extent to which each of the elements of a system was present in each organisation participating in a survey, was tested through targeted questions directed to both line managers and HR practitioners. The comparison of their responses (i.e. percentages of those who answered 'Agree' or 'Strongly Agree') was presented in figure 7-10 (see Chapter 7, section 7.5.9). The least agreement between the two groups was found in relation to the documented commitment from the Executive. The most frequent systemic element was reported by both managers and HR practitioners in

consultation with employees. The next highest agreement, reported in the HR managers' survey, was Risk Assessments.

While these responses seem to present a reasonable presence of systemic elements within the range of 40 to 50%, it was closer to 10%, which was revealed by more detailed questions. The consistent finding from many sources was the lack of clarity of what constituted a work stress prevention system (PsHS) for all participants, despite the OHS management system being well established and fully compliant. It is the application of risk assessments, a critical element of a PsHS that best provides a window into the lack of understanding of prevention systems amongst both managers and HR managers. While some 61% of surveyed HR practitioners agreed that risk assessments were part of their stress prevention system, when questioned about the precise nature of such assessments, they offered the following data:

- 23.5% included the identification of hazards within risk assessments;
- 5.9% included in the scope of such assessments, the whole organisation, whereas the majority only selected random or targeted workplaces;
- 21% conducted risk assessments within the last two years; and
- 3.4% conducted assessments regularly, whereas the majority did so in an ad hoc manner or randomly.

Another example of the poor quality of systemic intervention was exemplified by the reported lack of quality evaluations. None of the HR practitioners reported having evaluated their programs against measurable benchmarks, 32% reported evaluating them in general terms, and only 6.9% reported having pre-defined targets to meet in their work stress prevention strategy documents.

The lack of strategic intent in relation to work stress prevention, demonstrated through the interviews and surveys with both HR practitioners and line managers, was underpinned by the lack of conceptual clarity of work stress as well as the practical implications of the regulatory requirements for its systemic management. It is not surprising then that low support from the executive management was reported as one of the main barriers, since the low level of understanding, awareness

and skill was evident amongst those who should be expected to develop business cases, and influence the decisions and strategies in this area of people management (i.e. HR practitioners).

9.3 Barriers to systemic stress prevention

There were a number of barriers to systemic stress prevention identified as part of this research, some of which confirmed recent research which addressed a similar question in the European context (Iavicoli *et al.*, 2011; Kortum, Leka & Cox, 2010; Leka *et al.*, 2011b; Leka *et al.*, 2015) and the earlier, more general observations from the international context (Jordan *et al.*, 2003; Noblet, 2003). They have been categorised into the following: regulatory, organisational and conceptual and each is described in more detail below.

9.3.1 Regulatory barriers

The low level of uptake of work stress prevention systems within organisations reflects the overall unsystematic approach to this area of people management responsibility amongst governments, regulators, law enforcement agencies, educators, unions and industry bodies. This research revealed a broad recognition that work stress is a relevant and costly problem that needs attention and action. A common approach to this problem throughout the jurisdictions governing OHS has been to follow the European and UK model including psychological health within OHS legislation and treating it as an occupational health issue. While the promotion of psychological health (wellbeing), prevention of psychological ill health (work stress) and psychosocial risks feature in various OHS related guidelines, it has not been treated with as much rigour as traditional OHS relating to physical health, illness and injury.

While there is much rhetoric generated about the need for work stress prevention by OHS regulators, the reality of its implementation in organisations is either non-existent or ad hoc at best. The regulations governing this area have relied on the provisions of general duty of care and guidelines with no mandated regulations developed in any jurisdiction. Quite intentionally, the approach of most regulators

has been to view psychological health issues and breaches of OHS in this area as industrial relations issues, and to choose the educational path in response rather than enforcement or punitive line of attack. As a result, OHS inspectors and other regulator staff have not been effectively tackling the issue relating to psychological health (Johnstone *et al.*, 2011). The area where there has been greater concentration of legislative effort focused recently is on one psychosocial risk, namely workplace bullying. As more attention is given to this issue, it is likely that it will obscure the broader picture of work stress and numerous other psychosocial hazards in the workplace (Hoel & Einarsen, 2010). Even psychosocial hazard and risk of bullying, however, has been relegated in Australia to an industrial relations forum, by placing the responsibility for monitoring and enforcing the national anti-bullying legislation in Fair Work Commission's jurisdiction, as discussed in Section 5.4.

The soft approach to managing psychological health in the workplace by regulators, that is refraining from prosecutions, has been welcomed by industrial and employer bodies and there may be some merit in adopting such an attitude in the early stages of the development of this area of occupational health. However, there is evidence that the opposite approach of strengthening legislation and greater focus on prosecutions lead to both specific deterrence of OHS breaches (employers who are prosecuted) and general deterrence (others in the same industry) from offending (Schofield, Reeve & McCallum, 2009). There is ongoing debate as to the role that prosecution plays in securing compliance. The trend in the traditional OHS legislation has been in the opposite direction to that adopted in the psychological health context, which has led to employers receiving the message that behaviours linked to psychological injuries are not treated as seriously as breaches linked to physical injuries, by both legislators and prosecutors. Society's expectations, at the same time, have been increasing: to demystify mental health and treat it with a similar level of significance and investment, both in general health and in occupational health settings. An example has been the public outrage and media coverage of a bullying case leading to new legislation in Victoria (see Chapter 5, section 5.3.1) (WorkSafe Victoria, 2002).

There are a number of specific barriers of a regulatory nature which have been identified in this research and recent similar studies in Europe (Iavicoli *et al.*, 2011; Leka *et al.*, 2011b; Kortum, Leka & Cox, 2010) and they include:

- reliance on general duty of care rather than specific legislative codes addressing the entire scope of psychological health, instead limiting the relevant definitions of the OHS legislative instruments to statements: ‘health includes psychological health’;
- lack of clarity and specificity of terminology used throughout different jurisdictions in relation to work stress (e.g. mental injury, psychological injury, mental stress, etc.);
- no specific guidance or regulation on how to integration management of psychological health with the traditional OHS systems or how to implement psychosocial risk management systems;
- imprecise nomenclature of injury and illness related to psychological health, leading to limited value of the analysis of mechanisms of injury carried out by the Australian Safety and Compensation Council and other state based statistics gathering institutions;
- low level of prosecutions relating to breaches of OHS legislation relating to psychological health and overwhelming reliance on educational and persuasion approaches to compliance;
- confusion relating to the delineation of the responsibility for compliance with the management and prevention of work stress between OHS and Industrial Relations jurisdictions;
- poor level of skill of prosecution staff in dealing with the breaches related to work stress (Johnstone *et al.*, 2011); and
- paucity of examples of successful systems resulting in prevention of work stress through the application of psychosocial risk management.

It could be argued that these regulatory barriers have created lack of overall integrated response to this costly health problem, and that the underlying issues are related to the conceptualisation of work stress amongst the law and decision makers. Their beliefs about work stress and, in particular, whether individuals or

organisations are responsible for causing and resolving the issues are likely to match those of line managers, which have been identified in this research, and explored in more detail below. The intention expressed in many public fora to reduce and prevent work stress has not led to clear, co-ordinated and systemic approaches by legislators, that have been observed in traditional OHS or other illness and injury prevention contexts, for example: smoking, various cancers or road trauma. As an example of what a systemic approach involving all the relevant agencies can achieve in an area of health promotion and injury prevention, let us consider the development and maturing of traditional OHS systems and a more recent approach to road trauma management, that have proven capable of fulfilling the objectives of governments to reduce economic and human costs in these respective areas.

OHS management has experienced development for many decades, with a systems approach becoming prominent since the late 1980s (Bluff, 2003; Frick & Wren, 2000). It has now become accepted as an integral part of the modern workplace, with the responsibility for providing a risk-free environment taken seriously by employers. Appropriate budgets are allocated, staff trained, and systems created and implemented with a view to reducing risks and costs. As hazards are routinely identified and risks assessed, some risk controls include redesigning the systems of work to eliminate or reduce the risk of harm. These behaviours and organisational functions are underpinned by various legislative instruments, with enforcement elements supported by punitive sanctions, which have been recently toughened to include criminal records, higher fines and jail sentences in a number of jurisdictions. This research found that almost \$40M worth of fines has been issued under OHS legislation, for example, in Victoria during the last decade. Public attitudes and social expectations have evolved over time with one of the consequences being that employers generally accept their responsibility for creating risk free workplaces insofar as it is practicable without much debate. Although some employers may still hold the view that OHS laws have gone too far in holding them responsible for their employees' safety behaviours, there is generally little argument about their ethical responsibility, and that the social and economic benefit of OHS improvements has been significant. Reporting on health and safety performance as part of corporate governance has become accepted as a norm for most organisations and high standards apply to their system maintenance. Current attitudes relating to

responsibility for creating work environments free from risk to psychological health resemble those of the early stages of OHS development. Rather than organisations, individuals in the main were held responsible for their own safety and blamed when breaches of safety occurred. Attitudes to the management of psychological health in the workplace are shaped around work stress being an individual issue and there is uncertainty about the appropriateness of OHS systems being applied to work stress prevention. Governments and regulatory bodies appear to treat this area differently from physical health, with no clear regulations and no evidence of enforcement, and just over 1% of all fines related to safety breaches relate to this area. This approach by the regulatory regimes was confirmed in recent research of OHS inspectors who were reluctant to get involved in issuing notices for identified psychosocial risks because of their 'invisibility', lack of specific codes, regulatory guides or assessment tools (Johnstone *et al.*, 2011)

To take another area of change in decision makers' beliefs and attitudes that led to systemic approaches, it is also useful to consider the approach taken to prevention of motor vehicle accidents and improving road safety in Victoria. The results of this approach have been publicly and easily measured by the road toll, which stood at over 1000 in 1970 and reduced to 250 in 2013, while at the same time, the number of vehicle kilometres travelled increased dramatically. If the belief that individual drivers were solely responsible for their safety on the roads prevailed amongst the decision makers, it is unlikely that these reductions would have been achieved. While it can be argued that, to some extent, it is still true that the individual's own behaviour and personality factors impact on the probability of their involvement in a motor vehicle accident, it has not stopped systemic approaches to tackling this issue. The focus of policy makers in the last few decades has been on improvements to all the components of the road user system: from mandating car safety features, road engineering, driver education and increasing penalties, to name a few. Each of these changes was comprehensively evaluated and further adjustments made as more evidence became available (Newstead *et al.*, 1995). This is an example of a systems approach to a societal health and economic problem, as a result of the new conceptualisation of the problem as an interaction between the individual and the environment (Kasperczyk, 2010).

To tackle workplace stress and reduce its human and economic burden effectively using a systems approach, there needs to be an analogous paradigm shift in attitudes and beliefs amongst significant stakeholders, and in particular, amongst organisational decision makers and regulatory bodies. One piece of evidence – that regulations influence behaviour in the work stress prevention context – comes from the survey of HR practitioners and line managers reported in Chapters 6 and 7. The two most frequently reported systemic elements being present in organisations were found to be consultation with employees and risk assessments. Both of these are directly mandated in most state OHS legislations, and thus there was greater awareness and likelihood of their implementation even as individual projects in an ad hoc manner.

9.3.2 Organisational barriers

Another group of barriers to the adoption of systemic approaches to work stress prevention can be classed as organisational in a sense that they are in the domain of organisations, whereas those explored above were at a higher level of regulatory and inter-governmental realms. They are arguably all linked to the beliefs and attitudes related to work stress which are explored under the conceptual category. It is nevertheless considered helpful to identify the issues which can be addressed from within the organisations, particularly for those who recognise the need to address this area more strategically. They have been gathered from the interviews and surveys of both HR practitioners and line managers as well as extrapolated from the case studies.

Lack of strategic intent

One of the most fundamental barriers in organisation settings was the lack of clear strategic intent of key decision makers from the corporate governance level down to the middle management level to manage work stress that would be typically expected in any other initiative associated with high cost and risk. The observations carried out in the case studies saw only one of three organisations with a written documented policy prior to embarking on the project. All of them were challenged by the amount of resources allocated to it, with one (Case 1) limiting the project to a number of work units and geographical locations; and despite the original plan to

roll out the program with internal resources, it did not proceed a year later. None had business cases for projects or measurable targets against which evaluations could be carried out. There appeared to be some involvement and interest in the project displayed by senior executives and in one case (Case 3), where the steering committee comprised a few members of the Executive team. However, its agenda appeared to be driven by the HR and OHS representatives with little influence from the executives. Given that all three organisations examined through the case studies were large and effective in their fields, it is unlikely that the laissez faire approach observed in work stress prevention would have been tolerated in any other function driven by and directly linked to the organisational strategy.

The motivation that drove these projects in the first place appeared to be a balance of economic factors and compliance to different degrees in each case. The lack of strategic links to the organisational goals, however, was responsible for each of the projects being managed in an isolated and ad hoc manner, without clear accountability for achieving desired outcomes. In one case (Case 3) the resources allocated to the project were provided by a workers' compensation agent, as part of the state government's prevention incentive initiative, and was terminated when the funds were exhausted. Hence it can be concluded that the project was not considered strategic enough to allocate more internal resources to complete and evaluate the project.

The survey of HR practitioners revealed a very low (17%) affirmative response to the question about documented support from the Executive for the work stress prevention program. This response was somewhat higher when managers were asked if they agreed that such documented commitment existed, with 11% 'strongly agreeing' and 33% 'agreeing'; however there is a clear gap between this and the commitment to physical OHS, with a near 100% response to the same question. Managers attributed the lack of commitment and low priority directed to this issue as the greatest barrier to implementing systemic programs in their organisations.

Inadequate knowledge and skills

The underlying reasons for lack of strategic intent are likely to be related to either conceptual or attitudinal factors, which in turn are linked to the level of knowledge

and skills in relation to work stress and prevention. This was another frequently named barrier by both HR and line managers. This barrier was similarly reported by Noblet (2003), who noted its two aspects: the lack of information on how psychosocial work characteristics can influence health, and not having the knowledge to identify or address organisational issues.

In addition to these, lacking knowledge and skill elements included:

- inadequate knowledge and awareness of work stress in general, in all of its aspects, including its manifestations, differences between pressure and stress, its links to mental and physical health;
- lack of confidence, skill and experience in conducting psychosocial risk assessments at all management and HR/ OHS staff levels: a specific observation made in case studies that focus groups did not have the capacity to objectively assess risks and that they tended to base it on the strength of emotions expressed by the group;
- lack of skills in the application of prevention system and processes, despite their existence and regular implementation within the OHS management system; and
- lack of knowledge about prevention strategies, their different applications at organisational and individual levels and their effectiveness in different settings.

The objective of increasing knowledge and skills is relatively easily achievable, if there is sufficient motivation and resources committed to this task. The current state of training within organisations, however, was exposed through the responses of both HR and line managers. The survey results revealed that less than 30% of employees and managers receive any training, it is organised in an ad hoc fashion and few resources are allocated to training. Observations gathered from case studies and interviews provide sufficient data to conclude that the type of training provided is most likely related to individual stress management and resilience building skills, rather than knowledge and prevention and management skills such as psychosocial risk assessments.

The case study observations revealed a lack of capacity amongst local HR/OHS practitioners or managers to lead the project and advise senior management in relation to work stress prevention strategy. In each case, this gap was recognised to some extent and external consulting resources invited to fill it. In Case 1, for example, there was an explicit attempt at transferring skills to internal resources so the initiative could be self-sustaining and a skills workshop was included as part of the project plan. In Cases 2 and 3, consulting skills were utilised, however, for a pre-determined set of tasks that matched the internal project manager's understanding of work stress, namely for policy development and training development respectively. There appeared to be greater recognition of the need for more knowledge and skills in each studied organisation, however, no plans were generated and no resources were allocated to further increase their managers' skills.

Production pressures

One of the consistent hallmarks of organisational life is the pressure of production or service delivery to be achieved with maximum efficiency. The reality of this demand creates the very hazards linked to work stress that need to be addressed by people management systems and associated risks either reduced or prevented. At the same time, especially since there is little resident knowledge of the precise links and skills to tackle them effectively within organisations, little additional time is available for prevention projects. One of the ways in which this barrier manifested in the case studies was that those staff, whose involvement in risk assessments was considered vital, could not participate because they were committed to other work tasks. This was particularly evident in rostered or shift work environments where no other replacement staff was available.

A similar situation arises when training in any skills related to work stress are being offered in organisations. Since these skills are not treated with the same priority as production tasks by management, there is also reluctance to release staff due to reducing efficiency and adding to costs. As a result, when training is sourced and available attendances are low. One of the organisations observed (Case 3), had considered via its steering committee declaring the training compulsory, as it was often observed that those who need to gain the skills most are least likely to attend.

This suggestion, however, was eventually considered unrealistic and did not proceed.

Inadequate resources

The need for balance between production demands and people management initiatives can only be achieved with realistic resource allocation. There was consensus amongst those being surveyed and interviewed that inadequate resources, both in terms of staffing and finances, were allocated to prevention projects and work stress management in general. The survey of HR practitioners revealed that very few organisations had a clearly allocated budget for this purpose, and with most reporting it was being assigned to Employee Assistance Programs or 'staff welfare' projects rather than prevention systems. Inadequate resources are linked to the lack of priority placed on managing employees' psychological health as part of the overall organisational development or risk management strategy.

Turnover of key staff

This barrier of high turnover of staff was observed most starkly in Case Study 1, involving a large organisation which committed to commencing pilot work stress prevention projects in a number of work units and geographical locations and transferring skills to internal HR and OHS staff. One of the objectives was to roll out the initiative to the whole organisation. High staff turnover thwarted the project at two levels: firstly, local HR and OHS staff, who were targeted for skill development and who volunteered their involvement in the project, either left their employment or moved to other functions without transferring their skills to others; and secondly, there was a high turnover of line managers who were crucial for follow through with changes emanating from the prevention projects. As different supervisors, middle and high level managers changed, they lacked the background involvement and motivation to ensure the outcomes were implemented. Partly because of such frequent changes of personnel, ownership of prevention was delegated to advisory HR/OHS staff, rather than line management, and since eventually they also moved on, the roll out did not eventuate.

The underlying reason for this barrier, in the above example, is its unsystematic approach, which sees the projects implemented on an ad hoc basis rather than as

part of the overall system. As work stress prevention is integrated with other existing systems, such as OHS staff turnover, is not likely to affect its effectiveness.

Poor collaboration between organisational units

One of the features of an organisational system is its complex network of different functions, roles and interdepartmental communication and collaboration that enable it to fulfil its objectives. For the work stress prevention system to be effective, given its complex linkages between different parts of the organisation, it needs to be involved and engaged with either by line managers, HR or OHS units providing leadership and resources. The extent to which six different departments were involved in prevention processes was measured by the two surveys reported in Chapters 6 and 7. The summary of both HR and managers' reports of their frequency of involvement is reproduced in table 9-1 below. As the table shows, the most likely organisational units being 'frequently' involved were HR and OHS, but in less than 45% of cases, even though they would be considered as holding key advisory roles. Other departments that can also make significant contributions in many aspects of change required to reduce risks of work stress, such as Risk Management, Organisational Development or Finance, were reportedly involved in about 5 to 15% cases.

Table 9-1 Survey responses of frequency of involvement of organisational units in work stress prevention process

Organisational units	HR responses	Manager responses
HR	44.8%	25.0%
OHS	37.9%	32.5%
Injury Management	31.0%	23.1%
Risk Management	17.2%	12.5%
Organisational Development	13.8%	12.5%
Finance	3.4%	5.0%

This lack of collaboration as a barrier has been also observed in greater depth through interviews with HR practitioners, who were not able to answer some fundamental questions pertaining to prevention programs without referring to their OHS counterparts, and through the case studies. One of the striking features of

observed approaches to managing work stress programs was the delineation of responsibility for the project between OHS, Injury Management and Wellbeing (sometimes referred to as Staff Welfare or Wellness, which typically resided in the HR department). In larger organisations where these are managed through different units, often reporting through different executive lines, the lack of co-ordination acts as a block to overall program implementation. The philosophical views of the decision makers as to whether work stress is an occupational health and therefore risk and compliance issue determine which part of the organisation has the responsibility for its management.

Ineffective consultation with employees

One of the components of any risk management process, as stipulated by OHS legislation is consultation with employees at every stage of identifying hazards, assessing risks and planning its controls. This is particularly applicable to the area of psychological health, as none of these elements can be effectively completed without the involvement of staff directly affected by the hazards. The process of defining risk controls, essentially a problem solving approach, requires genuine involvement of employees and managers in this process (Leka & Cox, 2010). In line with other investigations the 'feeling that organisational interventions are the exclusive domain of management and recommending such interventions may be trespassing on management rights' (e.g. Noblet, 2003: 352) was also identified by this research as another significant barrier. The observations of participants in a number of focus groups during the assessment process was that they did not find the process empowering and expressed cynicism about whether any real changes can be achieved, as most of them would typically require significant investment of resources and/or changes in their management approach.

Limited involvement of unions and industrial relations linkages

Unions were reported to have been least frequently involved in work prevention processes with 75% of organisations (as reported by HR practitioners in their survey) rarely being involved or not at all. This trend was also observed in case studies which did not have a plan for communication with staff associations unless a specific work change created this as a necessity in compliance with their Enterprise

Bargaining Agreement. The result of unions' lack of involvement in this process as with any change or OHS related incident can lead to resistance by staff, lack of transparency of management decisions and reduced accountability for following through on the undertakings agreed during risk assessment (Landsbergis & Vivona-Vaughan, 1995).

Impractical risk assessment processes

For the risk assessment process involved in work stress prevention to be effective, it needs not to be 'complicated' or 'technical' in terms of its specification, as the goal is not absolute accuracy and specificity of its measures or 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" (Leka & Cox, 2010: 130). This is in line with the original model proposed by Cox who argued that "not only is the problem solving approach to health and safety management an effective way of dealing with the tangible hazards of work but that it can also be effective in relation to psychosocial hazards and the experience of stress at the individual level and at the organisational level" (Cox, 1993: 77). This finding was precisely replicated in Case Study 1, where the majority of participants proposed that the risk assessment process trialled in this approach should be simplified so that it would be more easily replicable, without needing to possess specialist skills and reducing the time dedicated to the prevention process. Their proposal was to simplify the language to that of a 'problem solving' approach rather than risk management in the entire process. This identified barrier was that the risk assessment process may be too demanding and counter-productive to the goals of the prevention process.

Cultural factors

The capability of any organisation to adopt the work stress prevention process relies on its culture, which either enables or inhibits staff in their participation. One observation brought forward by the managers involved in organising the prevention project (Case 1) was that '*people use the process to vent their issues*' rather than genuinely engage in identifying risk control action plans. This barrier is likely to be diminished when projects of this kind take place on a regular and systematic basis, with discernible changes being implemented as a result.

Another cultural barrier has to do with the degree of freedom staff perceive they have in expressing issues relating to work stress and openly discussing them. This lack of stigma and openness in the workplace is one of the prerequisites of effective staff engagement in the process, which assumes that employees are able to admit to experiencing various levels of work stress without any punitive repercussions. Workplace culture is necessarily closely interlinked with work design and work context factors, as well as leadership paradigms that impact directly on workers' experiences of 'psychosocial safety climate' and associated levels of work stress. It is postulated in this research that the conceptualisations of and attitudes to work stress and its prevention act as precursors to a culture that is more open to expressions of work stress and prioritising its prevention as a significant organisational strategy. A set of conceptual barriers identified in this thesis is discussed in the next section.

9.3.3 Conceptual barriers

The fundamental barriers to systemic implementation of PsHS underlying those classed as regulatory and organisational, and identified through the data collected in interviews, surveys and case studies, have to do with the way work stress is conceptualised by those in decision-making roles in key institutions and organisations. One of the most consistent observations gained from all the data gathering sources is the lack of clarity of language applied to the discourse related to work stress by those occupying significant organisational roles, either in line management or advisory HR or OHS functions. Stemming from the essential understanding of this notion is that it has potential legal implications for management in the workplace; there are a number of other conceptual components that need to be generally agreed from theoretical, jurisdictional and organisational management perspectives, if this complex phenomenon is to be effectively prevented and its costs to society reduced.

Data collected from interviews, surveys and case studies informed the generation of a list of the most prominent conceptualisations of work stress that can lead to

cognitive errors that have a direct impact on prevention behaviours of managers, namely:

- non-specificity of terminology;
- invisibility and intangibility;
- idiosyncrasy;
- complex causality;
- tension between organisational and individual contributions; and
- beliefs relating to the effectiveness of risk management or systemic approaches to prevention.

Table 9-2 presents a summary analysis of case studies described in detail in Chapter 8 in terms of conceptual errors and their effect on the outcomes of each project.

Table 9-2 Analysis of case studies and conceptual barriers to systemic prevention project implementation

Case study	Project drivers/ desired outcomes	Conceptual barriers	Organisational barriers	Actual outcomes
1	Pilot prevention program; skill transfer; roll out throughout the organisation	Complexity of causes; risk assessment is a complex process → Specialist skills are needed	Inadequate skills; staff turnover; production pressures; inadequate resources (shift work)	Problem solving approach adopted instead of risk management Short-term outcomes; no roll out in the long term
2	Work stress strategy, policy and process documentation	Terminological confusion; uncertainty of link between work factors and stress → limiting commitment from the Executive	Lack of skills/knowledge; staff turnover	Policy documentation with limited ownership from executive management and limited training
3	Reduction of workers' compensation costs	Complex causality; idiosyncrasy; individual-organisational tension → limiting outcomes to management skill development	Inadequate resources; production pressures	Training program for managers focused on their communication skills; no long-term strategy or programs

Non-specificity and terminology confusion

The current terminology of work stress has been criticised for being vague by numerous researchers and practitioners alike (e.g. Kinman & Jones, 2005), to the point where a radical reassessment is necessary to render the work stress discourse more meaningful, especially in light of its costly human and economic consequences. Some writers have expressed their exasperation with the ongoing confusion that research is adding to, with its focus on the “causes and consequences of job strain which is as voluminous as it is confusing” (Morrison & Payne, 2003: 128). The non-specificity and vagueness of the term ‘stress’ caused Briner (1996) to note that labelling an individual as ‘stressed’ is essentially meaningless. This viewpoint is borne out by this research, which confirmed that decision makers within organisations generally find this concept so confusing when asked to define it. Thus it has little to offer in the construction of interventions that have a tangible aim of reducing significant costs associated with negative human experiences at work.

One of the areas of clarity needed is related to its polarity as a concept. There are some efforts by way of popular education and media to present stress as a neutral concept and distinguish distress (negative) from eustress (positive). However, in the context of workplace conversations, as has been confirmed by this research, the overwhelming majority of workers attach a negative meaning to the word ‘stress’. This view is also in line with the contemporary theoretical view of work stress as a negative or unpleasant emotional experience (Cox and Griffiths, 2010). Similar to other studies of managers’ attitudes to stress (e.g. Dewe & O’Driscoll, 2002), as reported in Chapters 6 and 7, the participants overwhelmingly described their understanding of work stress with a negative connotation (91% mentioning only the negative aspects in their free text definition, and only 7% referring to its positive meaning; and in the survey 77.8% reporting it as negative and only 4.4% as a positive concept).

In their confusion in attempting to explain when and how it can have a positive meaning, HR and line managers encounter difficulties which lead to the dilution of the significance of the issues surrounding it. Some guidance materials attempt to

differentiate 'pressure' as a neutral term from 'stress' as a negative term to introduce clarity to the discussion. One of the barriers encountered in treating work stress as a strategically important issue for organisations to tackle is that to prevent an injury or illness, there needs to be clarity about its causality. Since at times, managers present and discuss this as a neutral concept (without a clear delineation when it can become a negative), this becomes a hindrance to strategy planning in the context of management where ambiguity is not a common feature.

Another area of confusion relates to the causality and symptomology of work stress. There are interchangeable meanings attributed to the word 'stress' that denote either its cause or effect, confounding symptoms and their causes. An example of such confusion can be found in the research literature such as Bond, Tuckey and Dollard (2010) who refer to, for example, workplace bullying as both a 'chronic form of stress' and a 'chronic stressor' in the same article. The same confusion is observable amongst many guidance materials produced by various government agencies, responsible for providing resources for organisations in complying with their legal requirements to reduce risks in all areas of health including psychological. Similarly, official analyses of mechanisms of injury in mental or psychological health add more to the confusion by employing imprecise definitions in contrast to their physical counterparts. Not surprisingly, when HR or line managers attempt to influence their executives who are responsible for strategy development, there is little clarity with respect to the relationship of work stress to organisational effectiveness.

The last decade has seen a convergence of risk management language in the area of studying stress interventions in the workplace as well as psychological health language in the area of legislation dealing with the expectations of employers to manage risk. This terminology is consistent with the OHS framework and its application to work-related stress (Cox *et al.*, 2000). This terminology is consistent with current research and policy and with the position of all Australian OHS jurisdictions, the British Health and Safety Executive and the European Commission. This nomenclature uses the following key terms:

- *Psychological health* is the overarching term of the area related to this aspect of worker health which of cognitive, emotional or mental in nature, in preference to the word 'stress'.
- *Psychosocial hazards* are those aspects of work design, and the organisation and management of work, and their social and organisational contexts, which have the potential for causing psychological or physical harm, in preference to using the word 'stressor'.
- *Psychosocial risk* is referred to risk of injury or harm associated with psychosocial hazards.
- *Psychological injury, harm or health outcomes* are used instead of the alternative term 'strain' when referring to symptoms or other negative health indicators.

The acceptance of this language in all guidance materials, despite the accepted complexity of psychological or mental health issues, it is argued, can be expected to address the current lack of acceptance of this area of management responsibility and arrest the current barrier related to non-specificity of the term stress and its resultant confusion.

Invisibility and intangibility

Another conceptual barrier identified through the data collected in this research has been linked to what is often referred to as the invisible or intangible nature of work stress. As managers are faced with the need to apply the OHS framework to psychological conditions, they need to confront the intangible nature of this risk. It is often described by managers and OHS inspectors (Johnstone *et al.*, 2011) as the reason for inaction in tackling the identified issue. Work stress is contrasted with the visibility and clarity of a physical injury as a way of underlining the difficulty in managing this phenomenon. There are, however, precedents in physical health management where invisible conditions are managed, such as back conditions or respiratory illnesses, which although invisible are tackled through traditional OHS processes in terms of identifying hazards and assessing risks associated with them.

The invisible physical conditions, however, it is argued are less intangible as they are able to be diagnosed with more observable methods such as X-Rays or MRI scans. While this may be the case, there are many examples where physical injuries, similar to psychological health outcomes, are diagnosed using a self-report method. There are also workplace experiences of physical health issues which have varying medical opinions rendering them just as intangible as psychological injuries, which nevertheless are capably managed within the OHS framework. Thus it is postulated that the belief that psychological health cannot be managed in the workplace, due to its invisibility, is one of the barriers to its systemic management.

Idiosyncrasy

There are often expressed beliefs about work stress that address differential experiences of each worker in response to a particular stimulus at work. The idiosyncratic nature of the individual response means that one person reports a poor health outcome and another does not, after exposure to the same situation. In fact, when the work experience is described as 'stressful' with 'stress' being conceptualised as neutral pressure, it may lead to a positive work experience for a worker with different personality characteristics or skill sets. This difficulty to predict the outcome of the same exposure by different workers to the same situation has been identified as one of the conceptual barriers.

As the language and framework of risk management are applied to this concept there are similarities between the physical and psychological health scenarios that may be overlooked by managers unless this belief is challenged and processed. In the physical realm, in most situations, the presence of hazards does not create a certainty of negative consequences. The concept of risk estimation is, in fact, employed to deal with this uncertainty. Although some physical hazards may cause harm only to some individuals, the risk associated with them can be estimated and appropriate control measures can be adopted commensurate with the level of risk.

Complex causality

The non-linear cause and effect link associated with psychological hazards and harm has also been identified as one of the conceptual challenges encountered by managers in dealing with work stress interventions. The cumulative effect of some

transactions between work aspects and the individual may result in psychological harm; however, rarely is there a directly observable incident that can be detected and pinpointed as the cause. The exceptions are traumatic incidents which have a specific date and time and are often reported as causes of post-traumatic stress or other mental health disorders. While it is true that causality of psychological harm in the workplace often has non-linear and multiple causes potentially linked to multiple events taking place at different times, there are also analogous experiences in the physical OHS realm, for example, exposures to multiple events which cumulatively lead to soft tissue back injury or skin diseases.

There is an extra level of complexity that needs to be recognised in the realm of managing psychological health, as it involves a set of human dynamics often involving multiple individuals, behaviours, personalities and imprecise language. The interviewees and survey participants, similar to the reports of OHS inspectors (Johnstone *et al.*, 2011), stated that the incident investigations related to psychological health are often “one person’s word against another’s” creating a difficulty in identifying the underlying cause. If specific knowledge, skills and tools are applied to these scenarios, it is feasible that they can be as adequately managed as many other complex situations involving traditional OHS processes. The conceptual error of complexity potentially leads responsible managers to conclude that all aspects of psychological health are too complex to manage or understand, whereas other practices requiring expert knowledge, for example, in the case of hazardous chemical materials, are followed according to the systems that have been implemented with adequate training provided.

Organisational – Individual responsibility tension

Underlying much of the complexity of the causal links between psychological harm and work factors argument is the conceptualisation of work stress as an individual issue rather than organisational. There was a sense of ambiguity detected amongst those interviewed and surveyed regarding the extent to which organisations have the responsibility for tackling the work stress issue. This is despite psychological health being clearly acknowledged as falling within a general duty of care domain of OHS legislation. Almost 30% of managers directly stated that they believed individuals are, in the main, responsible for managing work stress. Others who

responded that organisations hold that responsibility provided more comments both in the open-ended responses and interviews, indicating that the majority believed there is a shared responsibility between employee and employer. Whereas this is true, to the extent that all employees share responsibility for their safety at work and there is a legislative mandate for them not to put themselves or others at risk through their actions or omissions (WorkSafe Victoria, 2005), their responsibility for enacting prevention systems is limited to participating in the processes implemented by the employer.

This conceptualisation of work stress as an individual perception and by implication not objective or predictable was exemplified by an interviewed manager's comment that it is all 'in the eye of the beholder'. This belief expressed in many different ways during interviews, collected through survey data and case study observations referred to individual differences, personalities, life events and experiences as being responsible for diminished readiness for strategic action involving work stress. While an individual contribution to the experience of stress is manifestly true, these factors are accounted for within transactional models of work stress in terms of their moderating role in the appraisal process. The important aspect of understanding the phenomenon of work stress, in the context of this contemporary model underpinning current approaches to its prevention, is that it is a result of a transaction between the individual and their work environment, rather than residing fully in one or the other (e.g. Cox & Griffiths, 2010). The ambivalence about whether the individual or the organisation is responsible for causing and therefore preventing work stress contributes to the low level of strategic prevention activity. As such, this conceptual problem needs to be firstly acknowledged by the theories underpinning systemic prevention, secondly by education programs and thirdly by regulatory bodies responsible for policy development in this area.

Effectiveness of systemic prevention

Another conceptual barrier relating to work stress prevention explored by this research relates to the extent to which such programs are believed to be effective by decision makers. If individuals are more likely to engage in behaviours they believe to be achievable, as postulated by a well-established Social Cognitive Theory

(Bandura, 1997), where the behaviour in this context is for managers and other decision makers in organisations to engage in systemic work stress prevention, their beliefs about its effectiveness and whether they have adequate skills to achieve it are significant. If prevention programs are treated as organisational changes, it follows that these actors also need to believe that such change is needed; that this change will meet their needs; that they have perceived capability to implement it; that they have support from opinion leaders; and that the change outcome is attractive, according to the Change Readiness Theory (Armenakis *et al.*, 2007).

The surveys have consistently shown that only around 40% of managers and HR practitioners believe that the risk management approach to work stress prevention is effective. Some 15 to 20% believe they have adequate skills to conduct risk assessments. Far fewer HR practitioners (11%) than managers (32%) believe their executives expect them to implement systemic programs, and even this proportion of managers is quite low. Altogether these findings create a picture of low readiness amongst decisions makers for change and provide some explanation as to why so few organisations adopt systemic prevention approaches.

9.4 Theoretical implications

9.4.1 Adaptive theory and PsHS

This thesis explored the adoption of PsHS in Australian organisations utilising adaptive theory (Layder, 1998) to analyse three case studies, interviews and surveys. Adaptive theory allows for emerging theories, gathered from the experiences of the actors, to inform the extant, or pre-existing theories which form the context in which the investigation takes place. The assumptions underlying the PsHS theories relating to the conceptualisation of work stress form the context of this research. The data sources of this research gained from the triangulated sources were examined methodically yielding the emerging theory that managers' perceptions of and attitudes to work stress form the prerequisites of the adoption of PsHS prevention systems. These assumptions and implications for specific theories of Psychosocial Safety Climate and Organisational Health are further explored in the following sections of this chapter.

9.4.2 Assumptions of PsHS

The systemic approach to work stress prevention is referred to in this thesis as the Psychosocial Health and Safety (PsHS) framework. It has been interchangeably denoted in the literature as the Psychosocial Risk Management approach (e.g. Leka & Cox, 2010). This model has been underpinned by a number of fundamental assumptions that have not been previously articulated as a complete set.

This model is closely related to the organisational health theory that follows that that exposure to psychosocial hazards can lead to lower employee wellbeing (morale, satisfaction and emotional distress) which in turn leads to employees' behaviours (such as withdrawal from work, submission of work compensation claims, discretionary performance and engagement) which directly impacts organisational performance (Cotton & Hart, 2003). A summary of this model, juxtaposing the HSE model (Cox & Griffiths, 1995, 2010) with the organisational health framework is presented diagrammatically in figure 9-1 below.



Figure 9-1 Combined psychosocial risk management and organisational health frameworks (Adapted from Comcare, 2005)

The importance of language related to this mode needs to be noted. Organisational and work factors (leadership, work content and work context) need to be repositioned as psychosocial hazards. As such they can be identified, assessed and their

associated risks estimated, leading to taking some action which will control those risks. The relationships and causal linkages between these factors (hazards), their management (risk controls) and potential corporate outcomes, such as organisational effectiveness, are assumed to hold true. In other words, the fundamental assumption of the PsHS model is that it is effective in improving people outcomes and reducing costs.

Other related assumptions of the PsHS model have been identified as follows:

- OHS and PsHS frameworks are compatible with each other.
- It is possible to identify all relevant psychosocial hazards.
- It is possible to assess and quantify the risks associated with the psychosocial hazards.
- Participation of employees in the risk assessment phase is an essential element of the assessment process, and a significant success factor.
- Organisational changes resulting from risk control action plans are effective in reducing risks.
- Adequate organisational power is available to those engaging in risk control action planning to influence outcomes.
- Sufficient change to organisational and work factors is possible to affect both people and corporate outcomes.

If the discourse relating to PsHS is couched in work stress terms, as is often the case with most of the government publications, then additional assumptions are built into its application, namely that HR and line managers as well as others involved in the risk management process conceptualise work stress in such a way that is compatible and promotes this process. The compatible conceptualisations identified in this research include the following cognitions, attitudes and beliefs:

- Work stress is a negative construct.
- Work stress has negative health outcomes for workers and organisations.
- Work stress can be prevented with the PsHS approach.
- Work stress is caused by a transaction between the individual and their work environment.

- Although work stress has a complex transactional causality in each particular case, the focus on organisational and work factors can be effective in preventing it.
- Psychological and physical health outcomes can be treated using the same framework.

The findings of this research are that these assumptions cannot be taken for granted when designing and implementing a prevention program. The psychological health risk management theory also needs to address commonly held beliefs and conceptualisations of work stress.

Differences between OHS and PsHS need to be explicitly acknowledged and addressed in order to gain credibility amongst those who apply policies based on these theoretical constructs and who appear not to embrace them in their cognitions or attitudes. Such differences include the role of individual factors involved in transactions, resulting in poor health outcomes and a less precise and quantifiable risk assessment process, which may need to be adopted to resemble more of a problem solving approach. The capability of managers and employees alike in identifying psychosocial hazards and assessing their risks need to be taken into account in the theoretical constructs underpinning this approach. Currently accepted transactional theories of work stress have some way to go to demonstrate a more direct link between the exposure to hazards inherent in the design and management of work and psychological harm, so as to dispel the current confusion about its causal complexity and intangibility.

The findings of this research overwhelmingly suggest that there are differences between top management commitment as demonstrated through documented policy and involvement in the issues of OHS versus psychological health. Whereas compliance with the policy and audits related to general OHS issues is close to the 100% mark and discussions at board meetings or senior management meetings related to OHS are of the order of 60 to 80%, equivalent involvement in psychological health is in the range of 10 to 20%. These findings have theoretical

implications for OHS and PsHS models, if they are to be proposed as integrated into one system within organisations as various regulatory regimes require.

9.4.3 Validity of the assessment process in PsHS

Given the prominent feature of risk assessment in the systemic prevention process and low levels of skill and confidence reported by managers and HR practitioners in performing this task, there are some specific theoretical implications for its role in the psychosocial context. There is little known about how individuals assess risk related to what they believe to be invisible and intangible consequences, associated with complex and non-linear causes. The way in which individuals perceive risk salience of psychosocial hazards and their capacity to quantify it has not been studied. More research in this area may be needed to strengthen psychosocial risk management theory.

Managers were observed, in their interviews, to process their own experience of stress through a different lens to those of others, when faced with trying to identify the potential causes of stress and decide whether it is a positive, neutral or negative concept. This discovery is of interest in relation to the individual's ability to accurately assess risk, particularly involving psychosocial factors. Risk attribution theory, identified in the OHS management context, suggests attitudinal influences on safety behaviour. For example, there is a documented tendency to attribute negative occurrences involving others to internal causes and similar occurrences involving oneself to external causes (Lingard, 2002). This 'self-other bias' has been suggested to inhibit safety behaviour (DeJoy, 1994). If similar or other bias perception processes exist in a psychosocial risk assessment context, there is a need for some validation mechanisms to be introduced to increase the level of objectivity to such assessments, and improve their effectiveness and acceptance by decisions makers. These can be provided, for example, via people health outcome data, such as unplanned absences, social climate surveys or through a cross check of data collected through other focus groups in the same workplace.

9.4.4 Links between organisational change and PsHS

The findings of this thesis lead to a conclusion that work stress prevention initiatives are not sufficiently conceptualised in terms of organisational change. Hence they do not have adequate planning, management involvement or integration when compared to other organisational functions. Risk control action plan development involves necessarily planning some changes at either the team level or organisation level. As psychosocial hazards touch every aspect of work design, its management and cultural contexts as well as leadership behaviours, the assessments of high risk related to such hazards require sufficient power within organisations to effect change and openness on the part of those actors involved in risk assessment to provide honest feedback to managers. Likely proposed changes or risk controls flowing from these assessments have the potential to impact managers' performance, organisational function and budgetary resources.

As Case Study 1 showed there were a number of challenges for managers as the number of assessed risks directly or indirectly pointed at their leadership style or capacity to manage. Frequent changes in personnel and high staff turnover acted against the long-term value of such assessments and the action plans were recognised as change plans within themselves. It is proposed that the effectiveness of PsHS interventions would be improved, in the longer term, if they were recognised as planned changes in their own right and managed as such.

At a higher level, the introduction of systemic work stress prevention can be repositioned as organisational change, which demands different behaviours from top management down to all the line managers, supervisors as well as various players in the advisory capacity of OHS, HR and Industrial Relations. Change Readiness theory proposes that five beliefs (outlined in Chapter 2, section 2.10.3) are necessary for change to be effective. These were:

1. discrepancy (belief that change is needed);
2. appropriateness (belief that the change will match the need);
3. efficacy (perceived capability to implement the change);
4. principal support (support for change from opinion leaders); and

5. valence (belief that the change outcome is attractive) – categorised as extrinsic and intrinsic.

The findings of this research point to a low Change Readiness for most organisations with most managers (around 60%) expressing their doubt as to whether risk management approach is effective (low appropriateness), although a large majority (86%) believe work stress is increasing and a relevant issue for their organisation (discrepancy). Their efficacy operationalised in terms of their skills to implement risk assessments is low (15 to 20%) and principal support low, defined by their belief that their executive managers are committed.

9.4.5 Theory of Planned Behaviour and implementation of PsHS

Social psychology has long established a causal relationship between attitudes and behaviour (Ajzen, 1991). Positioning the notion of the implementation of PsHS as managers' behaviour that needs to be enacted, the Theory of Planned Behaviour (TPB) was used as a framework to establish the necessarily precursors of the intention of such behaviour (Ajzen, 2001). While most often applied to health promoting behaviours, it has been applied successfully to other contexts including OHS interventions (e.g. Harvey, *et al.*, 2001, Törner, 2011). This approach takes into account the complexity of organisations, the mechanisms of influence on safety behaviours and the elements of intention determinants (e.g. empowerment, autonomy and participation). These elements support turning intentions to behave safely into actual behaviour.

This theoretical construct was applied to the behaviours of managers in implementing systemic stress prevention programs (reported in Chapter 7, section 7.5.8). There were two factors significantly to intention: attitude, defined as outcome belief that PsHS was effective, and perceived behavioural control, expressed as the perceived skill in conducting psychosocial risk assessments. Other elements of the model, and in particular, normative beliefs relating to their perceived expectations of the executives to undertake a PsHS process and their beliefs in relation to organisational vs. individual causality, did not produce a statistically significant correlation with their intention.

This theory has proven to be a partly useful tool in determining how behavioural change can influence more organisations to adopt systemic prevention. This analysis has strengthened the conclusions that improving skills (efficacy) and knowledge of managers, especially targeting effectiveness, can reduce the identified barriers. Perceived behavioural control provides additional explanation about the potential constraints on action as perceived by the actor. It is also likely to help explain why intentions do not always predict behaviour (Armitage & Connor, 2001). The emphasis on skills and knowledge to improve behavioural intentions is consistent with the findings of a Norwegian study which observed that the strongest predictor of success in managing OHS was whether an organisation had personnel competency in OHS and with professional training, leading to a conclusion that “OHS competency is a pre-requisite of systematic OHS management” (Bluff, 2003: 24). This study also identified external pressure exerted by inspectors as the biggest barrier to implementation of OHS management systems: “in the early years, [there] was a perception that internal control needed to involve a big and complicated system” (Nytrö *et al.*, 1998: 305).

9.4.6 Psychosocial Safety Climate and conceptualisation of work stress

While safety climate has been studied for some time as a construct of perceptions of management commitment to traditional OHS, a new concept of Psychosocial Safety Climate (PSC) has been proposed by Dollard *et al.* (2007, quoted in Dollard & Karasek, 2010) within a Job Demand and Resources stress model (see Chapter 2, section 2.9). PSC refers to a climate for psychological health and safety, and is referred to as answering the ‘causes of the causes’, identifying the conditions within organisations which give rise to production that is conducive to healthy outcomes (Dollard & McTernan, 2011: 290). Its focus as a construct is on the commitment of management to psychological health, support, involvement and communication they engender in relation to psychological health and safety. It has been defined more simply as “policies, practices, and procedures for the protection of worker psychological health and safety”, where psychosocial safety relates to freedom from psychological and social risk or harm (Dollard & Bakker, 2010: 580).

As a proposed antecedent of work conditions which engender work environment free of psychological risk (i.e. the same outcome that PsHS aims at through its systemic approach), PSC is hypothesised to be strong where PsHS is implemented. Since this research has found a low adoption of systems in the workplace that focus on work stress prevention, which include policies, procedure and practices, it follows that the incidence of work environments with high PSC is also likely to be low. Furthermore, the barriers to the adoption of systemic approaches that have been identified through this research included fundamental conceptualisations of work stress, its causes and responsibility for its management. It is proposed that all of these identified conceptualisations are prerequisites of management commitment to employees' psychological health and safety. As such, it is hypothesised that another deeper level of managers' cognitions, beliefs and attitudes form the precursors to the PSC. Thus a theoretical extension of the PSC model is proposed to include the formation of cognitions and attitudes which directly impact on the extent of policy, process and processes supporting psychosocial health of employees. These conceptualisations are both measurable and can be enhanced through targeted training at a more preliminary level, shaping climate. This extension is diagrammatically presented in figure 9-2 below. It also shows further theorised antecedent influences of external and personal factors explored in this thesis, which are likely to shape personal opinions and concepts enabling or inhibiting managers' development of a strong psychosocial safety climate.

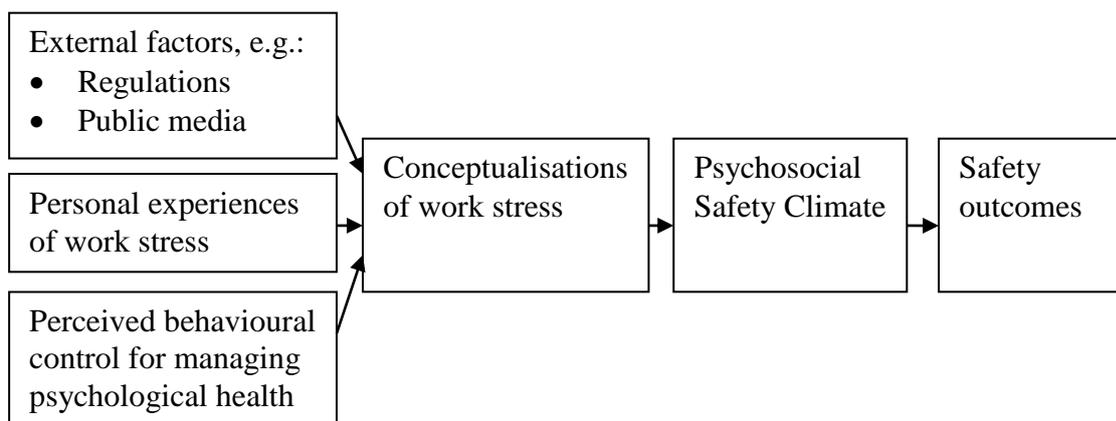


Figure 9-2 Theoretical antecedent relationships of conceptualisations and Psychosocial Safety Climate (Adapted from Dollard & McTernan, 2011)

Since PSC “reflects management value position and philosophy about work stress and management priority of regard for the psychological health versus production imperatives of the organisation” (Dollard, 2012:77), it is postulated that managers’ cognitions, beliefs and attitudes specifically related to causality and responsibility for prevention of employees’ psychological health will have significant impact on their value and philosophy and thus behaviours, demonstrating high PSC. It is therefore proposed that there is a direct relationship between conceptualisation of work stress as either an individual or organisational issue, adoption of PsHS prevention systems and a strong PSC. This theoretical relationship is expressed diagrammatically in figure 9-3 below. As this research did not include data collection measuring PSC, it is proposed as a theoretical extension to test in future research programs.

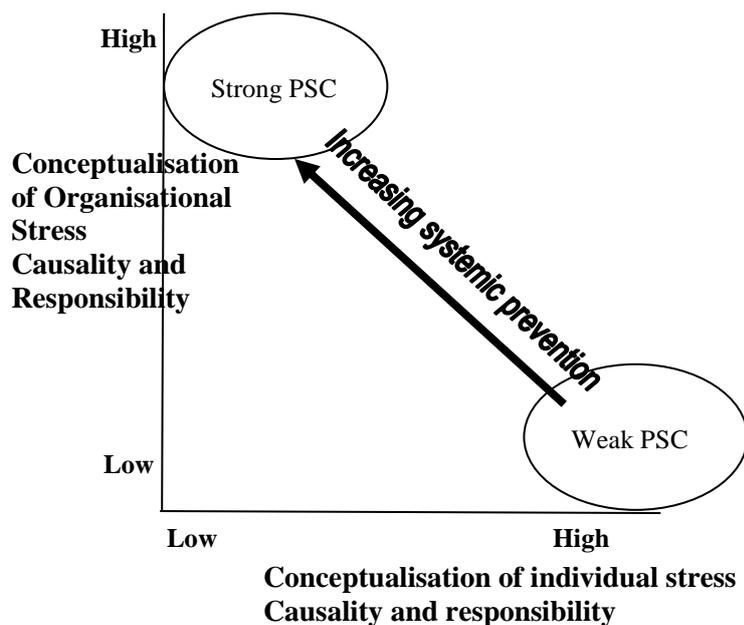


Figure 9-3 Predicted relationship between managers’ conceptual models of work stress, Psychosocial Safety Climate (PSC) and prevention approaches

9.5 Implications for policy

Policy makers in most jurisdictions in the developed world, following recommendations from international bodies (e.g. WHO, ILO, European Agency for Safety and Health at Work) have included work stress interventions and specifically psychosocial risk management on their agenda, to reduce the economic and human costs related to work stress. They have universally chosen, however, to rely on the general codes and voluntary standards in this area rather than introduce stronger legislation or regulatory codes to achieve compliance. The evidence presented here adds more weight to recently increasing conclusions that there is a gap between policy and practice, and that initiatives aiming to promote psychological health of workers have not had the impact anticipated both by experts and policy makers (Leka *et al.*, 2011a). In light of this growing evidence that legislative intention has not been matched by practices in organisations, and as more research confirms the powerful potential impact of tougher legislation to influence attitudes, social norms and organisational behaviour, it is likely that more regulatory codes will emerge specifically mandating systemic treatment of work stress prevention. This trend has already emerged in Australia, for example, the increased drive for reinforced legislative solutions to workplace bullying.

A considerable disparity between the management of physical and psychological health outcomes was documented through this research. Despite both using the same legislative instruments there was a distinct difference in approaches to dealing with these two issues by regulatory and enforcement agencies as well as by organisations. The differences were observed in the way policies were documented, systems applied, and the perceived commitment of executives. These findings should provide impetus for policy makers to strengthen legislative approaches to increase compliance. At the very least, there is a need for more direct guidance in the form of practical tools and processes, which will support organisations in implementing PsHS systems and integrating them with the OHS management systems, most of which are already in existence. A similar initiative has been recently commenced with the European framework for psychosocial risk management (PRIMA-EF) and the UK Health and Safety Executive's procedural 'toolkit' for the assessment and reduction of exposure to psychosocial hazards

leading to the development of Management Standards for Work-Related Stress (Leka & Cox, 2010; Mackay *et al.*, 2004). Similar endeavours however are needed in the Australian context.

This research has provided evidence for the need to significantly increase clarity in terminology applied to the discourse about work stress. The level of confusion with respect to defining 'work stress' and its specific features, such as polarity, causality and responsibility for its management, was overwhelmingly demonstrated through the data collected from interviews and surveys of both senior managers and HR practitioners. There was a need identified to move away from stress language and it was proposed to more intentionally couch the discussions explicitly limiting it to the already accepted lexicon applied in OHS legislative materials, that is, psychological health and related psychosocial risk management nomenclature. Any further development of guidance materials, clearly needed in all Australian jurisdictions, should adopt the new terminology standard. It is proposed that work stress prevention be redefined in terms of psychological health promotion and injury prevention. Specifically, information that needs to be available to employers in a more consistent manner includes the differences between pressure and early symptoms of harm, psychosocial hazards, and definition of psychological health and outcomes. One of the specific barriers that can be addressed through the development of practical guidance materials is the appropriate application of risk assessment methodology to psychological health.

In addition to guidance materials needed to increase general awareness and restructure the language to remove one of the barriers to tackling this issue strategically, this research has also identified a need for greater focus on education and skill development. Following on from the successful experience of increasing the skill levels of personnel dealing with OHS issues in the workplace through various initiatives of OHS regulators (e.g. OHS representative training), there is a significant need to enhance the skills of conducting psychosocial risk assessments. More generally, there are large skill gaps that can be tackled by formal and ad hoc education programs in the area of PsHS integration with OHS system management.

In general, one of the high level implications here is the recognition of the current lack of a multi-level and systemic approach to policy development in this area, that has been observed in other analogous complex social and economic health issues such as prevention of smoking and reduction of motor vehicle accidents. It is proposed that the area of psychological health in the workplace needs to evolve, just as health promotion has shifted from relatively simple models focused on behavioural risk factors to a greater emphasis on broader social determinants of health. Single method interventions have increasingly been replaced with multi-level formats, multiple risk factor interventions and extended campaigns, with whole-of-government implications. Health promotion structures have developed from ad hoc programs to well-resourced dedicated agencies with ongoing roles and a broad mandate.

Since this complex issue also involves multiple players comprising various levels of government (e.g. workers' compensation, health and safety inspectorates, enforcement agencies, injury prevention, industrial relations, as well as other parties playing different roles in the entire system: employer associations, unions, compensation insurance agents, health practitioners, education providers and researchers), all of their roles need to focus on one co-ordinated strategy with the leadership being provided by a single agency. If its underpinning and united objective is ensure that psychological health is treated with the same rigour as physical health, and compliance with both OHS and PsHS systems is taken seriously, then it is suggested the primary goals of reduction of injuries and costs are likely to be achieved. Based on this research, it is suggested that this initiative's success would be dependent on tackling the education component first, to ensure that conceptualisations of work stress are compatible with the proposed program. In particular, the beliefs about the effectiveness of this approach, concepts of complex causality and individual versus organisational responsibility need to be addressed. Determination by policy makers to see both OHS and PsHS treated with the same rigour by the regulatory agencies is expected to have at least two observable differences to the current situation, identified by this research: firstly, analyses of mechanisms of injury and root causes will be improved and better communicated to employers, and secondly, there will be more successful prosecutions issued for breaches related to psychological health alone.

9.6 Limitations of the thesis and areas for future research

The area of the adoption of systemic work stress prevention programs in Australia has limited national statistical or audit data available from any regulatory government agency. Available data relating to work stress is limited to workers' compensation cases, following the incidence of injuries rather than their prevention. Thus this research has produced the original source of organised information about the level of compliance with guidelines for managing psychological health in workplaces in Australia. Due to the constraints of candidature timelines and resources, it is necessarily limited in scope and geographical coverage.

The following limitations of the data utilised by this research and its scope have been identified:

- Sample sizes of the interviews and surveys were smaller than initially planned, due to poor response rates and despite follow up; however their distribution in terms of organisational size and industry were broadly proportional to the sample population.
- The majority of the organisations represented in the survey and interviews were large.
- The respondents to the survey predominantly represented Victoria and New South Wales.
- Interviews of HR practitioners and managers were limited to organisations in Victoria.
- Literature review of the effectiveness of work stress interventions was limited to the period of publication between 1979 and 2009.
- Reviews of prosecutions and penalties issued under OHS laws were limited to those publicly available in Victoria and South Australia, as their legislations were more explicitly including psychological health and were considered to be more likely to produce more cases.
- Measures of the TPB were limited to a single question per factor.
- The number of case studies was limited to three, due to time constraints and availability of potential organisations. All of the organisations were in the public sector and in Victoria, as this sector was considered more likely to invest in work stress prevention and Victoria was the target of the guidelines

published by WorkSafe Victoria. There was also no opportunity for long-term follow up of the studied organisations.

Further, there were no available data on people health outcomes or corporate performance in the studied organisations, hence no conclusions could be drawn in regard to the effectiveness of prevention approaches adopted. As the samples of HR practitioners were essentially independent of each other, with anonymity guaranteed for participants, there was no opportunity to correlate the conceptualisations of work stress by managers with the extent of systemic approaches reported by the HR managers.

The low response rates and sample sizes of both surveys have created a limitation to the analysis conducted; however, in-depth interviews and case studies provide more of an agency view to workplace stress and help to triangulate the data. Future research may now provide a way forward to addressing some of the themes identified in this thesis. These include the confirmation of the low uptake of systemic prevention in organisations utilising the survey tool developed here. It could also lead to testing the theoretical implications of the importance of managers' perceptions and attitudes in the formation of a future Psychosocial Safety Climate. Suggestions for future research are outlined in more detail in Chapter 10, section 10.7.

9.7 Implications for practice

Organisations have a more direct mandate to manage psychological health of their employees in line with current regulatory requirements. In the absence of a co-ordinated multi-level and whole-of-government approach, each individual organisation can increase the probability of success of their own prevention programs by focusing on removing the barriers identified in this research.

The beginning point for each organisation needs to take a strategic approach to this area of management responsibility. This will necessarily include its alignment with the overall organisational strategy, defining the measures of success, and developing policies and processes which will demonstrate executive commitment, integrate

PsHS with OHS and evaluate its effectiveness. This in essence should lead to the generation of a strong PSC, which is known to be a precursor to effective performance balanced with healthy outcomes. Risk assessments need to be designed so they are practical, simple to implement and appropriate for each work area. All of these initiatives need to be preceded with targeted awareness, communication and skill development ensuring the following objectives are met:

- language is more precise and couched in risk management terms, replacing the current work stress terminology;
- primary, secondary and tertiary systems of injury management of both physical and psychological are integrated and there is awareness of these including health promotion, incident management, claims management and return to work management;
- concepts of causality and individual vs. organisational responsibility are clarified;
- skills to undertake risk assessments are developed;
- effectiveness of systemic prevention programs is presented; and
- differences between OHS and PsHS are openly addressed, and beliefs challenging whether they are compatible and whether psychological health can be managed using the risk management framework are openly discussed.

The education component is most important as managers' attitudes to this approach are likely to shape their implementation behaviours. Appropriate awareness and skills development for all employees is likely to increase the probability of the program succeeding, since they need to participate and contribute to their area's psychosocial risk assessments. In addition, to ensure other identified barriers are minimised these organisational initiatives need to be adequately resourced including dedicating stable personnel resources. Assuming that a complete system approach is implemented, monitoring, review and evaluation need to take place on a regular basis. Organisational culture also needs attention to ensure it is conducive to open and effective participation of employees in risk psychosocial assessments.

9.8 Summary

Work stress prevention in Australian organisations has been found to be predominantly managed in an ad hoc fashion, despite the intention of health and safety regulations to tackle work stress using similar risk management approaches as currently exist in the OHS systems. While OHS systems are well established and achieve a high level of compliance, the situation with managing psychological health is poorly developed and tackled with few systemic elements in place.

This chapter collated the findings from the interviews, surveys and case studies, and analysed the data to identify and categorise the barriers organisations face in adopting systemic prevention programs. They were grouped into three categories: regulatory, organisational and conceptual. The conceptual barriers, in particular, were explored with a view to demonstrate whether they are compatible with the currently dominant psychosocial risk management theoretical framework. The implications were then discussed and adaptations to two theoretical models proposed: the Organisational Health Framework and Psychosocial Safety Climate.

The chapter then moved to articulate the implications of this research for policy at a multi-level involving all relevant agencies and institutions. Its implications for practice at the level of individual organisation were then discussed.

The next chapter draws together the main findings arising from this study and summarises the key barriers identified in organisations' adopting systemic prevention. It also discusses the contributions made by this research to theory, policy and practice, and suggests ways in which it may inform new research.

10 Conclusions

10.1 Introduction

Work stress is a growing and costly issue for organisations. Its prevention and management has been on the agenda of policy makers for some time. The predominant approach to work stress to deal with this problem, in the developed world, is in the OHS framework through a systemic application of psychosocial risk management. Since there was limited available research regarding the extent to which organisations comply with these requirements, this research set out to determine its incidence and, having hypothesised that its adoption was low, to identify and explore the barriers to the systemic approach. This goal was achieved by conducting five lines of enquiry. First, a structured literature review of meta-analytic studies evaluating the effectiveness of work stress interventions published during the last 30 years was carried out, which found that there are few reported systemic and organisational approaches to workplace stress interventions. It established, however, that where present, effectiveness is enhanced when systemic approaches are implemented. Second, a review of OHS regulations in Australia and New Zealand relating to psychological health was conducted, followed by an investigation of the prosecutions and penalties issued by the regulators in South Australia and Victoria. This analysis revealed that all Australian OHS regulatory jurisdictions include the responsibility for providing a work environment that is free of risk to psychological health and use general provisions of duty of care of the respective OHS laws to ensure compliance with this requirement. However, despite treating the risk of psychological and physical injuries, there is little enforcement in terms of prosecutions or penalties for lack of compliance in the area of psychological health of employees. Third, a set of interviews and surveys of HR practitioners was conducted to determine the incidence of systemic prevention approaches in organisations. Fourth, interviews and surveys of senior managers explored their conceptualisations of work stress. Finally, the three case studies revealed more in-depth reality of the experiences of organisational intervention implementations. These case studies were used to identify the barriers to the application of psychosocial health and safety systems. This chapter concludes the thesis by providing the key summary points arising from the findings, its

contribution to theory and practice, and points to future research which may advance this important area of workplace health and wellbeing.

10.2 Systemic aspects of work stress prevention

While the need for prevention of work stress has been clear, there has been little agreement on how to best achieve this objective. The volume of research literature produced in the last few decades is likely to have been responsible for much confusion and lack of clarity in language, theory, methodology and results of work stress interventions. The focus on the different approaches to prevention and their varied degrees of effectiveness has been on the differences between individual versus organisational aspects. The understanding of this concept has become clearer as the dominant theories converged into a transactional framework emphasising the interaction between the environment and the individual's appraisal of its attributes, including those believed to pose harm to the individual. Thus it deals with the complexity of this phenomenon and provides for the degrees of variation, explaining why some conditions are experienced as stressful by one person and not by another. There has been more rigorous research available that has led to the classification of work and organisational aspects linked to causes of work stress, grouped into work content and work context factors. These resulted in the generation of a practical list of work factors that are under management control and which, if systematically addressed, have a recognised potential to prevent work stress.

These theoretical and research paradigms have provided a genesis for the creation of a regulatory framework by policy makers concerned with both rising costs and emerging future health implications of work stress risks. This approach involved the inclusion of work stress issues in the OHS legislative framework, by extending the definition of health to include psychological health. As such, the two areas of workers' health – physical and psychological – have been integrated into an OHS approach which itself has evolved over a much longer but relatively recent period into a management system and a discipline. One of the key platforms of this approach combining OHS and work stress responsibilities was the risk management

methodology, which has been referred in the psychological health context as psychosocial risk management.

This thesis firstly confirmed that those prevention programs which are systemic in nature are more likely to produce effective outcomes. Systemic prevention programs were identified in the literature as those combining both organisational and individual aspects as well as all three levels of intervention (i.e. primary, secondary and tertiary). Based on the available research combining both work stress and OHS knowledge, the following factors were concluded to be the hallmarks of a particular approach being systemic:

- risk assessment methodology including systematic hazard identification, risk assessment and control planning, implementation and reviews of its effectiveness;
- top management commitment;
- a participative approach – consultation with employees;
- evaluation and review; and
- a strategic approach to prevention activity.

This systemic approach to work stress prevention has been referred to in this thesis as Psychosocial Health and Safety (PsHS). This nomenclature and a set of specific criteria, the presence of which determines the extent to which work stress prevention is systemic, has enabled this research to answer the key objective: to identify the barriers for organisations which organisations face in adopting such programs.

10.3 Regulatory treatment of psychological health

The consistent approach of policy makers to tackling the problem of work stress has been through the OHS legislative framework; however, psychological health has been found not to be managed with the same rigour and philosophy as traditional OHS relating to physical health, illness and injury. It has been manifestly treated with a softer approach as demonstrated by the following observations arising from the findings of this thesis, reported in Chapter 5, which include:

- reliance on general code rather than mandated regulations or codes of practice;
- reliance on voluntary compliance with guidelines;
- lack of generation of clear regulations or practical tools for psychosocial risk management;
- small proportions (around 1%) of all prosecutions and penalties issued for breaches of OHS code related to psychological health, mostly related to workplace bullying, which in most cases included some form of physical harm; and
- reluctance of inspectors and prosecutors to deal with psychological health using the OHS code, instead referring the issues to Industrial Relations departments.

10.4 Extent of systemic prevention in organisations

The literature review confirmed that the number of reported organisational interventions was much lower than those of individual interventions. While researchers hypothesised that this situation may reflect the lack of reporting of systemic prevention programs rather than their actual absence in organisations, this research documented their occurrence for the first time in Australia. Conclusions were also drawn about the barriers to the implementation of these programs in organisations, the key here being the lack of information of psychosocial work characteristics and inadequate knowledge to address such issues at the organisational level.

Despite research pointing to systemic prevention being most effective and despite the regulatory attempts to encourage risk management approaches to stress prevention through OHS legislation, this research has demonstrated that organisations in Australia have not adopted such approaches. The most likely and probably overstated proportion of such programs is about 9%, according to the findings of the organisational survey (see Chapter 6, section 6.5.2). Most organisations overwhelmingly identified their approaches as ad hoc, adopting a programmatic and reactive rather than systemic approach. This is in contrast to the

response to managing physical injuries and illnesses, which typically attracts 100% compliance with the OHS system. There are very few, if any, organisations with a demonstrated integration of PsHS and OHS systems. It can be concluded that the maturity of PsHS systems is at its early stage of development, which is comparable to a historical perspective of OHS systems. And therefore, if they are to progress, similar influences to those applied to OHS will be needed. For example, tougher applications of OHS legislation have shaped the societal norms which created higher expectations of employers to manage risks to workers' health. Similar initiatives may be required in multi-level strategic approaches to develop greater maturity of PsHS as a discipline and encourage greater uptake in Australian organisations.

10.5 Barriers to adopting systemic stress prevention

This research explored the barriers to adopting systemic programs through the analysis of a set of findings from surveys and interviews which yielded significant results, despite the limitations in survey responses. The findings were further augmented by the analysis of three case studies. The identified barriers have been categorised into three groups: regulatory (relating to the high level policy issues), organisational and conceptual. The regulatory barriers relate to the differential treatment between OHS and PsHS, lack of clear guidance materials and lack of collaboration and consistency to tackling this issue amongst various jurisdictional policy levels. The findings confirmed other international experience that sought more guidance from governments and raising awareness, so that employers do not need to rely on anecdotal evidence or partial information gained through industry communication forums or public media. One of the key barriers related to both regulatory and organisational areas, arising from the analysis of interviews, surveys and case studies, was the lack of adequate knowledge and skills relating to all aspects of PsHS amongst the regulators, HR practitioners and managers alike. This was similarly highlighted as one of the biggest barriers that needed to be conquered in the OHS system development in its transition to a more mature discipline. The lack of strategic intent in relation to managing psychological health was also common at the organisation policy level and higher regulation level. As a result of such lack of strategic thinking in this area, similarly noted in research recently

available from the European experience (Iavicoli, 2011; Kortum, Leka & Cox, 2010) also revealed: low prioritisation of psychosocial issues in comparison to production pressures; low executive commitment; lack of resources and practical tools for assessment; lack of political decisions and enforcement; lack of consensus; and lack of specific regulation on the subject. Cultural issues of reluctance of workers to disclose work stress and participate fully in the process designed to assess and control psychosocial hazards were also identified.

Underlying these barriers, this research explored cognitions, attitudes and perceptions of actors within organisations which have been found to block the promotion of systemic solutions to work stress. It was achieved through interviews and surveys with HR practitioners and managers, as well as through the analysis of case studies. The most prominent of these barriers, as discussed in Chapter 7, reporting the findings of the managers' survey and interviews, were:

- confusion surrounding the terminology related to work stress in general;
- perception that psychosocial issues are too complex to manage, and particularly in terms of their causality, intangibility and idiosyncrasy;
- perception that individuals instead of, or equally as well as, organisations are responsible for managing work stress;
- belief that psychosocial risk management approaches are not appropriate or effective for dealing with work stress; and
- belief that key parties have no adequate skills to conduct psychosocial risk assessments.

The resulting impact of these conceptualisations of psychological health or stress in the workplace is that either the prevention programs are not implemented at all or, if they are, they tend to be conducted in an ad hoc manner. Where psychosocial risk management activities take place, specific skills to conduct risk assessments are sourced externally and employees are involved in consultation processes; however, they usually lack sufficient influence to take action to change work factors. Where risk control action plans are developed as part of the risk management activity, they are not conceived as organisational change plans and thus do not lead to long-term solutions.

Significant conceptual errors revealed amongst the managers, potentially impacting their prioritisation of prevention, strategic intent, and allocation of resources, relates to the fundamental question about the differential contribution of individual factors (personality or personal life) versus the organisational environment and work factors. When faced with a forced choice of the highest order contribution, managers tended to reject work factors and focus on the individual reactions in their definition. In short, managers tend to attribute stress to an individual's inability to deal with the work or the workplace, rather than seeing the structure of work and the work environment as being important contributing factors. This reveals a fundamental mismatch between the assumptions of PsHS and the beliefs and attitudes of key players in the organisational setting. An investigation of other actors, such as regulatory policy makers, may uncover similar disparity, which would explain the current lack of strategic prioritisation of work stress prevention as a systemic issue in the Australian community. This issue points to a potential new area for research.

10.6 Contributions to theory, policy and practice

This thesis has challenged the assumptions of the psychosocial risk management theoretical framework and proposes it needs to take into account decision makers' conceptualisations of work stress and related constructs. The identified beliefs and attitudes amongst HR practitioners and managers hinder their capacity to implement systemic prevention programs. This research has contributed to the development of theory in this area by identifying key concepts that play a role in influencing managers' intentions to adopt systemic prevention. Through the application of adaptive theory, the emerging theory of the importance of attitude towards work stress was developed, building on the pre-existing theories relating to work stress prevention. The thesis has argued that these conceptualisations are antecedents to the Psychosocial Safety Climate theory. In addition, it has also provided a basis for reinterpreting psychosocial risk control actions as organisational change.

Complementing its contribution to theory, this thesis has also contributed to knowledge about work stress prevention by quantifying the extent of its systemic practice in Australian organisations. On the basis of the five lines of enquiry it has

conceived a number of applications for policy and practice of psychosocial risk management in organisations. The key proposal with the greatest potential impact is that psychological health be managed through a multi-level and systemic approach. For psychological health to be treated with the same rigour as the management of traditional OHS, new regulatory initiatives are needed. Underlying all of these improvements, there is a need for targeted awareness and an education campaign to address a fundamental confusion that currently exists in workplaces with respect to work stress. The concepts that have been identified to focus on include understanding of causality, invisibility, complexity and responsibility for prevention, with a particular reference to individual and organisational influences. It is also proposed the discourse be couched in risk management terms in preference to stress language, which has been found to be imprecise and confusing. Developing skills in psychosocial risk management and providing practical tools for organisations were also identified as practical implications. A concerted effort by multiple government agencies responsible for this area of people management, in conjunction with employer and staff associations, has the potential to reduce the significant economic and human costs associated with work stress, similarly to other social health issues.

10.7 Suggestions for future research

This investigation, while answering the questions it set out to tackle, has revealed further opportunities for research which could provide more insight into this complex area of managing psychological health in the workplace.

- A confirmation of the extent of adoptions of systemic prevention systems with a greater scope of organisations, a larger sample size, and a broader industry sector and geographical representation.
- To progress the theoretical extension to the Psychosocial Safety Climate, it would be of interest to test the conceptual constructs of cognitions, attitudes and beliefs of key decision makers as antecedent factors in the formation of organisational policies, processes and practices for the psychological health of employees.

- The area of PsHS research and policy would greatly benefit from more research into the links between organisational and work factors and causes of psychological harm, while taking into account personal factors.
- To counter the current ambiguity about the level of effectiveness of PsHS preventions, more evaluative research providing evidence, particularly about the long-term impacts on people health outcomes as well as corporate outcomes would be of benefit.
- As one of the key findings has been that the lack of skills and knowledge is a barrier to systemic prevention programs, echoed by other international findings, an increasing number of new educational programs are expected to be offered in this area. Hence some evaluations of their efficacy would increase their acceptance and effectiveness.
- The question of employees' capacity to accurately assess psychosocial risk deserves a more concerted research, in particular, the role of risk attribution and risk perception as applied to the psychological context and contributing to OHS safety in general.
- The research findings of the Theory of Planned Behaviour reported in this thesis were not extended from the intention to actual behaviour in implementing systemic programs. Additional research of the application of TPB to this behaviour would be of importance, in order to confirm whether the contributing beliefs have a direct path to the actual behaviour.
- Perceptions of regulatory approaches to managing work stress within organisations would be of benefit for policy formulation.

Finally, there is some scope in undertaking research in the area of health and wellbeing promotion as opposed to work stress prevention. Whereas this research has focused on the psychological health area couched in terms of prevention of injury and illness, there is another angle that has been identified and briefly addressed in this thesis: health promotion. It is proposed that even greater benefit can be derived from focusing on promotion of psychological health rather than preventing harm. The challenge of this approach needs to be acknowledged in that the concept of "wellbeing" faces similar ambiguity to that of "stress" and to progress it further it will need to be more precisely defined than it is at the moment.

Nevertheless, such positive and developmental approaches are more likely to engage strategic organisational development approaches and resources rather than OHS and Injury Prevention.

10.8 Summary

This thesis explored the extent to which Australian organisations implemented systemic work stress prevention programs despite the encouragement to do so through OHS legislative agenda. Drawing on five original lines of enquiry and a review of the relevant Australian and international literature, the thesis identified the barriers to such programs being adopted. It has also challenged the assumptions of the generally accepted theory of psychosocial risk management in the light of incompatible conceptualisations of work stress amongst managers and HR practitioners. The managers' cognitions, beliefs and attitudes toward work stress and intentions of implementing prevention programs were analysed in terms of the Theory of Planned Behaviour. Their low perceived knowledge and skills to conduct psychosocial risk assessments were also confirmed as significant barriers. This research suggests an extension to the recently proposed theory of Psychosocial Safety Climate to include the conceptualisations of work stress hypothesised to act as antecedents of policy, process and practice for psychologically healthy workplaces.

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Appendix A. Glossary

ACCI	Australian Chamber of Commerce and Industry
ACTU	Australian Council of Trade Unions
AIG	Australian Industry Group
APS	Australian Psychological Society
ASCC	Australian Safety and Compensation Council
BSI	British Standards Institution
CIR	Critical Incident Response
CISD	Critical Incident Stress Debriefing
CVD	Cardiovascular disease
DCM	Demand/control model
EAP	Employee Assistance Program
EBA	Enterprise Bargaining Agreement
ERI	Effort/reward imbalance
ESENER	European Survey of Enterprises on New and Emerging Risks
EU-OSHA	European Agency for Safety and Health at Work
HR	Human Resources
HSE	Health and Safety Executive (UK)
HSR	Health and Safety representative
ILO	International Labour Organisation
Job Stress	see Work Stress

Line Manager refers in this thesis to any middle management role within an organisation that has people and function management responsibilities that is below the Executive level and above a supervisor/ team leader.

NHMRC	National Health and Medical Research Council
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NIOSH	National Institute for Occupational Safety and Health (U.S.)
NOSHC	National Occupational Health and Safety Commission (Australia)
Occupational Stress	see Work Stress
OECD	Organisation for Economic Co-operation and Development
OHS	Occupational Health and Safety
OHSMS	Occupational Health and Safety Management System
PAS	Publicly Available Specification
PSC	Psychosocial Safety Climate
PsHS	Psychosocial Health and Safety
PAR	Participative Action Research
PAR-RM	Participative Action Research Risk Management
Presenteeism	The lost productivity that occurs when employees come to work but as a consequence of illness, or other conditions, are not fully functioning
PRIMA-EF	European framework for psychosocial risk management
Psychological Injury	Psychological or mental health condition caused by work stress which typically presents as workers' compensation claims.
Psychosocial Hazard	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 and physical harm".
SME	Small to Medium Enterprises
SLIC	The Committee of Safety Labour Inspectors
TPB	Theory of Planned Behaviour
VECCI	Victorian Employers Chamber of Commerce and Industry
VTHC	Victorian Trades Hall Council
VWA	Victorian WorkCover Authority

- WHO World Health Organization
- WorkCover State agency responsible for workers' compensation and, in some States, also administration of Occupational Health and Safety.
- Work Stress A negative response of an individual to their work environment, affecting them physiologically, cognitively, behaviourally or emotionally (HSE, 2000).

Appendix B – Invitation to participate in the study

INVITATION TO PARTICIPATE IN THE STUDY OF WORK STRESS PREVENTION IN AUSTRALIAN ORGANISATIONS

Your organisation has been selected for a possible inclusion in a study investigating how workplaces manage and prevent occupational stress. This study is being conducted as part of a doctoral degree by Richard Kasperczyk and supervised by Professor Ronald Francis at Victoria University's Research Centre for International Corporate Governance in the Business and Law Faculty.

The study comprises the following elements:

- Interviews with HR Executives to gain insight into how your organisation deals with the issue of stress prevention
- Collection of available quantitative data relating to your organisation's HR metrics (e.g. Compensation costs, unplanned absences, staff turnover)
- Interviews and surveys of Senior Managers to ascertain their perceptions, beliefs and practices relating to work stress.

All of the questionnaires and interview data will be de-identified to protect the confidentiality of the respondents and the organisation will only be recorded by the code relating to its size and industry sector.

The participation in the study will be voluntary and every participant will be provided with the information about the study, seeking their consent and outlining the steps to protect their confidentiality and the risks.

Each participating organisation will be provided with the summary of research findings.

I will contact you within a few days to find out if you would be willing to participate in the study and explain it in more detail. Alternatively, you are welcome to call me to discuss this study at any time on: (03) 8681, 2444 or 0419 329 178.

Any queries about your participation in this project may also be directed to the primary researcher supervising this project: Professor Ronald Francis on (03) 9919-1212.

This study has been approved by the University's Human Research Ethics Committee. If you have any queries or complaints about the way you have been treated, you may contact the Secretary, Human Research Ethics Committee, Victoria University, PO Box 14428, Melbourne, VIC, 8001 phone (03) 9919 4781.

Yours sincerely,

Richard Kasperczyk

Email: richard.kasperczyk@live.vu.edu.au

M: 0419 329 178

Appendix C. Survey of Systemic Prevention (HR/OHS practitioners)

Organisational Systemic Stress Prevention Survey

1. Information about your organisation and stress prevention

This survey relates to your organisation's work stress prevention strategies and systems.

Thank you for agreeing to participate in this study which is part of research into systemic aspects of organisational stress at the School of Business and Law of Victoria University conducted by Richard Kasperczyk.

Please answer the following questions about the whole organisation. If it is more appropriate to respond to the survey in relation to one division or department of the organisation, please indicate so in Question 5, below.

Please be assured that all the responses will be anonymous.

1. Organisation type

2. Industry type

3. State(s) the organisation operates in

- Vic
 NSW
 Qld
 SA
 WA
 NT
 ACT
 Tas

4. Number of employees

5. If your responses relate to a part of the organisation, please describe it and provide the number of employees:

6. Your primary role

- Human Resources
 OHS
 Injury Management
 Risk Management
 Organisational Development
 Wellbeing

Other (please specify)

7. Your position/ responsibility

- Department Manager / Executive
 Team Leader
 Consultant/ Advisor

Other (please specify)

Organisational Systemic Stress Prevention Survey

8. If you would like to receive a report of the findings relating to this survey, please provide your name and email address below (optionally):

Organisational Systemic Stress Prevention Survey

2. Approach to Stress Prevention

This page describes the organisation's approach to work stress prevention which will be dealt with in more detail on the following pages.

1. This organisation implements work stress management and prevention

Systematically
 Ad-hoc
 Rarely
 Not at all
 Don't know

2. The following components of work stress prevention system are present in our organisation:

	Strongly agree	Agree	Don't know	Disagree	Strongly disagree
Documented policy and strategy	<input type="radio"/>				
Documented process for stress intervention	<input type="radio"/>				
Consultation with employees	<input type="radio"/>				
Risk Assessments	<input type="radio"/>				
Integration with the OHS system	<input type="radio"/>				
Documented review and evaluation	<input type="radio"/>				

3. In terms of general OHS, the following is in place in our organisation:

	Strongly agree	Agree	Don't know	Disagree	Strongly disagree
A documented OHS Policy	<input type="radio"/>				
A documented commitment from the Executive in the OHS policy	<input type="radio"/>				
Regular OHS Workplace Audits	<input type="radio"/>				

4. Has there been any work stress prevention/ intervention programs conducted in this organisation in the last 2 years?

Yes
 No
 Don't know

5. If you answered "Yes" to the above question, please describe briefly what was done and how it was conducted

Organisational Systemic Stress Prevention Survey

6. Which of the following have taken place in the last 1-2 years in this organisation, as a planned stress prevention activity (please tick as many as apply)

- | | |
|---|--|
| <input type="checkbox"/> Organisational changes (e.g. policy/ process change) | <input type="checkbox"/> Stress management/ resilience training for employees |
| <input type="checkbox"/> Recruitment/ Selection changes | <input type="checkbox"/> Stress awareness/ mental health training for managers |
| <input type="checkbox"/> Physical environment changes | <input type="checkbox"/> Activities to improve communication |

Other (please specify)

7. Has this organisation ever conducted a work stress risk assessment?

- Yes, within last year Yes, within last 1-2 years Yes, longer than 2 years ago No Don't know

Organisational Systemic Stress Prevention Survey

3. Stress Risk Assessment

1. How often does the organisation conduct stress risk assessments

- Not at all
 Randomly/
Spot checks
 Ad hoc
 At least once a
year
 Every 1-2 years
 Every 2-5 years

2. What was the organisational scope of the risk assessment?

- Entire organisation
 Selected departments
 Selected teams

3. What method of stress risk assessment was used (please tick all that apply)

- Standardised questionnaire
 Focus Groups
 Non-Standardised questionnaire
 Interviews

4. Did the risk assessment include identifying sources of stress/ psycho-social hazards (e.g. workload, workplace, interpersonal conflict etc)?

- Yes
 No
 Don't know

5. What type of data did the risk assessment include (please tick all that apply)

- None
 Unplanned absences
 Compensation claims
 Staff turnover
 Lost time injuries
 Exit interviews
 OHS Incidents
 Don't know

General comments on Risk Assessment (optional)

Organisational Systemic Stress Prevention Survey

4. Stress Prevention Strategy

1. Please state to what extent you agree with this statement:

Our organisation's stress prevention policy/strategy is effective:

- Strongly agree Agree Disagree Strongly disagree

2. Is there a documented commitment from the Executive in the stress prevention policy/strategy?

- Yes No Don't know

3. Does the stress prevention policy outline management responsibilities?

- Yes No Don't know

4. Is this policy communicated to all employees?

- Yes No Don't know

5. Does the policy/ strategy include targets to reduce specific stress-related measures (e.g. stress claims, unplanned absences etc)?

- Yes No Don't know

General comment on stress prevention strategy (optional)

Organisational Systemic Stress Prevention Survey

5. Top management commitment

1. Please state to what extent you agree with this statement:

Our organisation's top management is committed to preventing and managing work stress:

- Strongly agree
 Agree
 Somewhat agree
 Somewhat disagree
 Disagree
 Strongly disagree

2. How often is work stress discussed at senior management meetings as a separate minuted agenda item?

- Never
 Once a month
 Once a quarter
 Once every 6 months
 Once a year
 Don't know

3. How often are general OHS issues discussed at senior management meetings?

- Never
 Once a month
 Once a quarter
 Once every 6 months
 Once a year
 Don't know

4. How often is work stress discussed at Board meetings as a minuted agenda item?

- Never
 Once a month
 Once a quarter
 Once every 6 months
 Once a year
 Don't know

5. How often are general OHS reports and issues discussed at Board meetings?

- Never
 Once a month
 Once a quarter
 Once every 6 months
 Once a year
 Don't know

6. Please estimate the amount of budget that is allocated to stress prevention and/or mental health promotion?

Organisational Systemic Stress Prevention Survey

6. Employee Participation and Awareness

1. Are work stress issues discussed at staff meetings

- Not at all
 At all meetings
 At some meetings
 Don't know
 At most meetings

2. To what extent are the following people involved in stress prevention programs?

	Frequently	Sometimes	Rarely	Not at all	Don't know
Senior managers	<input type="radio"/>				
Team leaders	<input type="radio"/>				
Union/ Staff Associations	<input type="radio"/>				
OHS Committees	<input type="radio"/>				

3. Is work stress discussed at the OHS Committee meetings?

- Yes, as a standard agenda item
 Yes, only if an issue is raised
 No
 Don't know
 There are no OHS Committees

4. What proportion of these groups of people attended a work stress awareness session in the last year?

	No such sessions were available	None attended although it was available	Few	Some	Most	Don't know
Senior managers/ Directors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Managers/ Team leaders	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Employees	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Organisational Systemic Stress Prevention Survey

7. Integration with OHS System

1. Please state to what extent you agree with the following statements.

It is possible to manage work stress using the Occupational Health and Safety System:

- Strongly agree
 Agree
 Somewhat agree
 Somewhat disagree
 Disagree
 Strongly disagree

2. Management of psychological health and safety is similar to management of physical health and safety

- Strongly agree
 Agree
 Somewhat agree
 Somewhat disagree
 Disagree
 Strongly disagree

Please comment on why or why not:

3. I believe I have adequate skills to conduct work stress risk assessments

- Strongly agree
 Agree
 Somewhat agree
 Somewhat disagree
 Disagree
 Strongly disagree

4. The Executive Team expect me to initiate stress prevention using a Risk Management approach.

- Strongly agree
 Agree
 Somewhat agree
 Somewhat disagree
 Disagree
 Strongly disagree

5. I believe Risk Management approach is effective in preventing/ managing work stress.

- Strongly agree
 Agree
 Somewhat agree
 Somewhat disagree
 Disagree
 Strongly disagree

6. How often are the following organisational units engaged in the stress prevention process?

	Frequently	Sometimes	Rarely	Not at all	Don't know
HR	<input type="radio"/>				
OHS	<input type="radio"/>				
Injury Management	<input type="radio"/>				
Risk Management	<input type="radio"/>				
Organisation Development	<input type="radio"/>				
Finance	<input type="radio"/>				

Organisational Systemic Stress Prevention Survey

8. Stress Prevention Evaluation and Review

1. Are the stress prevention activities reviewed and evaluated for their effectiveness?

- Yes - against a quantifiable benchmark Yes - generally No Don't know

2. How often is stress prevention policy/strategy reviewed?

- N/A - there is no strategy Never Every few years At least once a year Don't know

3. What do you believe is the best approach to preventing and managing stress in the workplace?

4. What do you believe are the main barriers to implementing systemic stress prevention program in your organisation?

Thank you for your participation.

Richard Kasperczyk

For any further comments or questions please contact me on: 0419329178

**Appendix D. Managers' Work Stress Beliefs, Intentions and
Readiness Survey**

Manager Work Stress Survey

1. Your opinions and beliefs about work stress - Demographic data

Thank you for agreeing to participate in this study which is part of research into systemic aspects of organisational stress at the School of Business and Law of Victoria University conducted by Richard Kasperczyk (Contact: richardk@resolutionsrkt.com.au or Phone: 0419 329 178).

The survey consists of 3 pages. Please be assured that all your responses will be anonymous.

1. What type of organisation do you work for?

- Government Private Not-for-profit

2. What industry best represents your organisation?

3. How many employees does your organisation employ?

4. Which State does your organisation operate in?

- Vic Tas SA WA NSW Qld NT ACT

5. Please select the best description of your position:

- Executive/ Senior Manager Middle Level Manager Team Leader/ Supervisor

6. Your gender is:

- Male Female

7. Your age bracket is:

- < 30 years 31-40 years 41-55 years >55 years

Manager Work Stress Survey

2. Your opinions about work stress

1. Work stress is a relevant concept in our workplace

- Strongly agree
 Agree
 Somewhat agree
 Somewhat disagree
 Disagree
 Strongly disagree

2. Work stress has been increasing in the last decade

- Strongly agree
 Agree
 Somewhat agree
 Somewhat disagree
 Disagree
 Strongly disagree

3. Costs related to work stress are significant in our society

- Strongly agree
 Agree
 Somewhat agree
 Disagree
 Somewhat disagree
 Strongly disagree

4. How would you define work stress?

5. Please rank the following statements about the meaning of stress, according to what you think of stress (where 1 means you agree with it the most and 3 - the least).

Work stress is best defined as:

	1 - Agree most	2 - Somewhat agree	3 - Agree least
An interaction between the individual and the environment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Something in the environment or organisation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
An individual's reaction to something	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

6. I think of work stress as a concept that is mostly:

- Neutral
 Negative
 Positive

7. Work stress has the following impacts on:

	Positive	Neutral	Negative
the organisation's function	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
the individual's psychological health	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
the individual's physical health	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Manager Work Stress Survey

8. Rank the following causes of work stress in order of their significance, in your view

	Top rank cause	2nd rank cause	3rd rank cause	4th rank cause
Work design factors such as workload and workplace	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Individual personal issues	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Work environment factors such as interpersonal relationships	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Individual personality factors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Comment about work stress causes (optional)

9. I believe the responsibility for preventing and managing work stress rests with:

- mainly individuals who experience stress
- mainly organisations

Comment (optional)

10. My personal experience of work stress has been

- Very negative Negative Neutral Positive Very positive

11. If you ever experienced work stress personally, what do you believe were its causes?

Manager Work Stress Survey

3. Work stress prevention and management in your organisation

1. It is possible to manage work stress using the Occupational Health and Safety System

- Strongly agree
 Agree
 Somewhat agree
 Somewhat disagree
 Disagree
 Strongly disagree

2. Management of psychological health and safety is similar to management of physical health and safety

- Strongly agree
 Agree
 Somewhat agree
 Somewhat disagree
 Disagree
 Strongly disagree

Please comment on why or why not:

3. I believe the risk management approach is effective in preventing or managing work stress.

- Strongly agree
 Agree
 Somewhat agree
 Somewhat disagree
 Disagree
 Strongly disagree

4. I have adequate skills to conduct work stress risk assessments.

- Strongly agree
 Agree
 Somewhat agree
 Somewhat disagree
 Disagree
 Strongly disagree

5. The executive team expects me to manage work stress in my unit using a risk management approach.

- Strongly agree
 Agree
 Somewhat agree
 Somewhat disagree
 Disagree
 Strongly disagree

6. My organisation implements work stress prevention programs

- Systematically
 Ad-hoc
 Rarely
 Not at all
 Don't know

Comments

Manager Work Stress Survey

7. If your organisation implements some stress prevention initiatives, please answer the following questions in relation to the components included in those initiatives.

Our organisation's stress prevention/ intervention includes the following components:

	Strongly agree	Agree	Disagree	Strongly disagree	Don't know
Documented policy/ strategy	<input type="radio"/>				
Documented commitment from the Executive	<input type="radio"/>				
Documented process for such intervention	<input type="radio"/>				
Consultation with employees	<input type="radio"/>				
Consultation with unions	<input type="radio"/>				
Risk Assessment	<input type="radio"/>				
Collection and analysis of data	<input type="radio"/>				
Documented review and evaluation	<input type="radio"/>				

8. If your organisation implements work stress prevention programs does it involve collaboration with the following parts of the organisation?

	Frequently	Sometimes	Rarely	Not at all	Don't know
HR Dept	<input type="radio"/>				
OHS	<input type="radio"/>				
Injury Management	<input type="radio"/>				
Learning & Development	<input type="radio"/>				
Risk Management	<input type="radio"/>				
Finance	<input type="radio"/>				

9. Please answer the questions about your organisation's provision of training in work stress.

	Frequently	Sometimes	Rarely	Not at all	Don't know
Employees receive training	<input type="radio"/>				
Managers receive training	<input type="radio"/>				

10. What do you believe is the best approach to preventing and managing stress in the workplace?

Manager Work Stress Survey

11. What do you believe is the most convincing rationale for implementing work stress prevention programs?

12. What do you believe are the main barriers to implementing systemic stress prevention programs in your organisation, if any?

13. Do you intend to implement any work stress prevention or intervention programs in the area under your management?

- Yes, definitely within the next 12 months
- Yes, likely to (within the next 2-3 years)
- Possibly, but with no specified timeframe
- Not likely
- Definitely not
- Not sure

If yes, please comment on the sort of program you are planning to implement.

Thank you for your participation.

Richard Kasperczyk
E. richardk@resolutionsrkt.com.au
P. (03) 8681 2444
M. 0419 329 178