

DEFINING A CASE OF WORK-RELATED STRESS

Jonathan Houdmont, BSc, MSc, PGCE

Thesis submitted to the University of Nottingham
for the degree of Doctor of Philosophy

August 2008

TABLE OF CONTENTS

ABSTRACT	x
PREFACE	xi
ACKNOWLEDGEMENTS	xxi
1. INTRODUCTION	1
1.1 YET MORE RESEARCH ON WORK-RELATED STRESS?	1
1.2 THEORETICAL PERSPECTIVE AND TERMINOLOGY	2
1.2.1 Occupational health psychology	2
1.2.2 Transactional stress theory	3
1.2.3 Terminology	4
1.3 IMPERATIVES FOR DEVELOPMENTS IN CASE DEFINITIONS	6
1.3.1 National policy	6
1.3.2 European policy	9
1.3.3 The research imperative	11
1.4 CHAPTER SUMMARY AND CONCLUSIONS	13
2. CASE DEFINITIONS FOR WORK-RELATED STRESS IN LARGE-SCALE SURVEYS IN BRITAIN: A SYSTEMATIC REVIEW OF THE LITERATURE	15
2.1 INTRODUCTION	16
2.2 THEORY AS A FOUNDATION FOR CASE DEFINITIONS	18
2.2.1 Early theoretical perspectives on work-related stress	18
2.2.2 Contemporary theoretical perspectives on work-related Stress	20
2.2.3 Interactional stress theory	21

2.2.4 Transactional stress theory	26
2.2.5 Case definitions in the scientific study of work-related Stress: Design informed by theory?	28
2.2.6 Summary	33
2.3 THE CURRENT INVESTIGATION	32
2.4 METHOD	33
2.4.1 Systematic reviews	33
2.4.2 Identification of the literature	35
2.4.3 Relevance and quality assessment: Inclusion criteria	36
2.4.4 Review of the literature for evidence	37
2.5 RESULTS	38
2.5.1 Results of the search	38
2.5.2 The prevalence of work-related stress	39
2.5.3 Case definitions	45
2.6 DISCUSSION	46
2.6.1 Case definitions based on perceived health status	47
2.6.2 Single-item case definitions	59
2.6.3 Transactional stress theory and case definitions	52
2.6.4 Limitations of the study	53
2.7 CONCLUSIONS	54
 3. DEVELOPMENT OF A WORK-RELATED STRESS CASE	
DEFINITION FOR LARGE-SCALE SURVEYS	56
3.1 INTRODUCTION	57
3.1.1 The current investigation	59
3.2 METHOD	59
3.2.1 Participants	59

3.2.2 Data collection: Interviews and focus groups	72
3.2.3 Data analysis: Template analysis	76
3.2.4 Validation	81
3.3 RESULTS	82
3.3.1 Stakeholder group and role	83
3.3.2 Case definitions used in professional practice	85
3.3.3 Applications of case definitions in practice	88
3.3.4 Benefits in defining caseness	89
3.3.5 The nature of work-related stress	90
3.3.6 Case definition variables	92
3.3.7 Implications of the development of a case definition	100
3.4 DISCUSSION	102
3.4.1 Discernment of a case definition	103
3.4.2 Multi-factorial perspective	104
3.4.3 Declaration of work-related stress	106
3.4.4 Unreasonable psychosocial hazard exposure	106
3.4.5 Health status	109
3.4.6 Triangulation: Sickness absence and presentations to health professionals	111
3.4.7 Negative affectivity	113
3.4.8 Limitations and further research	116
3.5 CONCLUSIONS	120
4. CONSISTENCY BETWEEN THE SURVEY-BASED AND THE PERSONAL INJURY CASE DEFINITIONS FOR WORK-RELATED STRESS	122
4.1 INTRODUCTION	123

4.2 THE RISE IN PERSONAL INJURY LITIGATION FOR WORK-RELATED STRESS	125
4.3 THE PERSONAL INJURY CASE DEFINITION FOR WORK-RELATED STRESS	137
4.4 THE CURRENT INVESTIGATION	141
4.5 METHOD	142
4.5.1 Data sources and analysis	144
4.6 RESULTS	145
4.6.1 The mediating role of stress	145
4.6.2 Declared experience of harm	146
4.6.3 Unreasonable psychosocial hazard exposure	148
4.6.4 Psychological manifestations of ill health	151
4.6.5 Triangulation: Sickness absence and presentations to healthcare professionals	153
4.6.6 Negative affectivity	155
4.7 DISCUSSION	156
4.8 CONCLUSIONS	159
 5. THE PERSONAL INJURY CASE DEFINITION FOR WORK- RELATED STRESS: ISSUES OF STRUCTURE AND APPLICATION	 160
5.1 INTRODUCTION	161
5.2 LEGAL QUESTIONS IN OCCUPATIONAL HEALTH PSYCHOLOGY	162
5.3 REFORM OF THE PERSONAL INJURY CASE DEFINITION FOR WORK-RELATED STRESS	165
5.3.1 The scope for reform	165
5.3.2 Research evidence from occupational health psychology in recommendations on reform	167

5.4 THE PERSONAL INJURY CASE DEFINITION FOR WORK-RELATED STRESS	172
5.5 THE CURRENT INVESTIGATION	173
5.6 METHODOLOGY	174
5.6.1 Identification of data sources	174
5.6.2 Content analysis	178
5.7 RESULTS	181
5.7.1 Issues of foreseeability	181
5.7.2 Issues of breach	194
5.7.3 Issues of causation	202
5.8 DISCUSSION	209
5.8.1 Foreseeability: Discussion and recommendations	209
5.8.2 Breach: Discussion and recommendations	217
5.8.3 Causation: Discussion and recommendations	225
5.8.4 Miscellaneous procedural issues associated with the application of the personal injury case definition	235
5.8.5 Radical case definition reform: The placement of work-related stress in statute	241
5.9 CONCLUSIONS	247
 6. THE SOCIAL CONSTRUCTION OF CASE DEFINITIONS FOR WORK-RELATED STRESS	 249
6.1 INTRODUCTION	250
6.2 MEDIA REPRESENTATIONS, DISCOURSES AND THE CONSTRUCTION OF UNDERSTANDING AND BEHAVIOUR	252
6.3 MEDIA REPRESENTATIONS OF WORK-RELATED STRESS	254
6.4 THE CURRENT INVESTIGATION	255
6.5 METHOD	257

6.5.1 Data sources	257
6.5.2 Data analysis: Critical discourse analysis	258
6.5.3 Coding	261
6.6 RESULTS	262
6.4.1 Article frequency	262
6.4.2 Themes	263
6.4.3 Lexical cohesion	267
6.4.4 Stakeholder voices	270
6.7 DISCUSSION	273
6.7.1 Representations, discourses and stakeholder actions on tackling work-related stress	274
6.7.2 Implications for practitioners	276
6.7.3 Limitations and further research	277
6.8 CONCLUSIONS	278
7. CONCLUSIONS AND FUTURE DIRECTIONS	280
7.1 TENSION BETWEEN THEORY AND PRACTICE	280
7.2 FUTURE DIRECTIONS IN RESEARCH, POLICY AND PRACTICE	285
7.2.1 Organisational stress management activities	286
7.2.2 The role of the general practitioner in tackling work-related stress	288
7.2.3 Industrial injury compensation	294
7.3 CLOSING REMARKS	298
8. REFERENCES	304
9. APPENDICES	351

INDEX OF TABLES

Table 1: Documents retrieved from title keyword search	36
Table 2: Prevalence rates and case definitions in large-scale surveys of work-related stress incorporating British samples	43
Table 3. Personal injury claims for work-related stress in England and Wales on which judgment was passed (1993-2007) (including awards where appropriate)	135
Table 4. Personal injury claims for work-related stress in England and Wales on which judgment was passed (2002-2007)	178
Table 5. Frequency, by title, of reports on personal injury claims for work-related stress in the British daily newsprint media (1 January 1996 to 8 February 2007)	262
Table 6. Headlines from reports on personal injury actions for work-related stress in the British daily newsprint media (1 January 1996 to 8 February 2007)	266
Table 7. Lexical cohesion in headlines of articles relating to personal injury claims for work-related stress in British daily newsprint media (1 January 1996 to 8 February 2007)	269
Table 8. Stakeholder voices in British daily broadsheet newsprint Reports on personal injury claims for work-related stress (1 January 1996 to 8 February 2007)	270

INDEX OF FIGURES

Figure 1: Initial coding template	81
Figure 2: Final template: Stakeholder group and role portion of template	85
Figure 3: Final template: Case definitions employed in professional practice portion of template	87
Figure 4: Final template: Professional applications of case definitions portion of template	88
Figure 5: Final template: Benefits in defining cases of work-related stress portion of template	89
Figure 6: Final template: The nature of work-related stress portion of template	91
Figure 7: Final template: Variables for inclusion in a case definition for work-related stress portion of template	99
Figure 8: Final template: Implications of defining caseness for work-related stress portion of template	102
Figure 9: Framework to a case definition for work-related stress for large-scale workforce survey application	104
Figure 10: Flow chart representation of the personal injury case definition for work-related stress	141

ABSTRACT

This thesis concerns case definitions for work-related stress; that is, the criteria used for the identification of a person as presenting a case. It has its focus on case definitions used as the basis for measurement in two related domains in the British context: large-scale nationally representative workforce surveys and personal injury litigation. Together, these contribute to informing policy and practice on tackling the challenge to occupational health presented by work-related stress.

The thesis begins by placing the subject matter in its applied context through a consideration of research and policy imperatives for the development of case definitions for work-related stress. This is followed by a series of studies that employ a systematic review methodology and qualitative methodologies including template analysis and content analysis to explore the use, consequences and development of case definitions used in the two domains of interest. Relationships between both sets of case definitions are explored and implications for research, policy and practice considered. The studies culminate with a critical discourse analytic investigation into the media representation of the case definition used in personal injury litigation for work-related stress and its possible contribution to informing activities on tackling and defining work-related stress. The final chapter brings together the results and conclusions from preceeding chapters. It considers some possible ways forward in the study of case definitions for work-related stress that might contribute to improvements in the occupational health of the nation's workforce.

Keywords: work-related stress; case definition; occupational health psychology; survey; personal injury litigation.

PREFACE

Work-related stress is a heavily researched subject. In recent decades great strides have been made in the development of knowledge and understanding of its causes, nature and consequences. However, it appears that in the delineation of case definitions; that is, the criteria used for the identification of a person in a population as presenting a case, progress has failed to keep pace with scientific developments in the study of the construct. In the British context, this may be particularly so in the areas of large-scale nationally representative workforce surveys and personal injury litigation.

At face value, the case definitions for work-related stress used as the basis for measurement in these two domains might not appear related in any obvious way. However, as this thesis shall demonstrate, the two are mutually influential. Moreover, both contribute in important ways to shaping the public discourse on work-related stress and, together, bring pressure to bear on the shaping of policy and practice on tackling the challenge to occupational health that it presents.

As an occupational health psychologist, I became aware of the issues surrounding case definitions for work-related stress upon appointment to a research post in the Institute of Work, Health and Organisations at the University of Nottingham. Within this position I was dedicated to working on a project commissioned by the British Health and Safety Executive that concerned the development of a new case definition for work-related stress that would be receptive to translation into an assessment tool for use in future large-scale government-commissioned surveys. In addition to me, the project team

included Professor Tom Cox CBE and Professor Amanda Griffiths, who together led the project and are my thesis supervisors.

The project, and associated report presented to its commissioner (Cox, Griffiths & Houdmont, 2006), built on a body of research on work-related stress undertaken by the Institute for the Health and Safety Executive over more than a decade. That work began in 1993 with the publication of a report that pointed to the efficacy of treating work-related stress as an occupational health issue and, consistent with health and safety common practice, from a risk management perspective (Cox, 1993). Subsequent reports described and tested risk management procedures as they apply to work-related stress in a series of case studies (Cox, Griffiths, Barlowe, Randall, Thomson & Rial González, 2000; Cox, Randall & Griffiths, 2002). Together, these reports contributed to the development of the Health and Safety Executive's statements of good practice on common sources of work-related stress and its procedural 'toolkit' for the assessment and reduction of exposure to these: the Management Standards for Work-Related Stress (Mackay, Cousins, Kelly, Lee & McCaig, 2004). Following publication of the Management Standards, the Institute's research for the Health and Safety Executive has continued and developed a dual focus on (i) the definition of a case of work-related stress (Cox, Griffiths & Houdmont, 2006) and (ii) the process evaluation of the implementation of risk management procedures for work-related stress (Cox, Karanika, Mellor, Lomas, Houdmont & Griffiths, 2007).

Aims and Focus of the Thesis

This thesis takes as its stimulus a series of aims from the aforementioned project commissioned and funded by the Health and Safety Executive that

concerned the development of a case definition for work-related stress. Specifically, that project aimed to:

1. Examine whether there was inconsistency in the design of case definitions for work-related stress used in large-scale nationally representative workforce surveys in Britain and the implications of inconsistency, should it exist, for the prevalence rates generated by those surveys.
2. Develop a framework for a case definition for work-related stress for use in future large-scale nationally representative workforce surveys based on the elicited opinions of subject-matter experts drawn from key stakeholder groups.
3. Strive for consistency of design, in so far as it might be possible, between the new case definition and other key case definitions used by stakeholders to guide their activities on tackling work-related stress.

The last of these aims was stipulated by the Health and Safety Executive as a means of optimising acceptance among stakeholders on the validity of the new case definition and the prevalence rates that it might generate when applied within future surveys. Acceptance among stakeholders on these points was held to be important for galvanising support for activities targeted at the reduction of work-related stress.

Taking the above aims as a starting point, the main aims of this thesis are to:

1. Examine the theoretical foundations and design of case definitions for work-related stress used in large-scale nationally representative workforce surveys in Britain and to consider the implications of case definition design for the prevalence rates generated.
2. Identify the structure of a case definition for work-related stress for use in large-scale nationally representative workforce surveys on the basis of views elicited from subject-matter experts drawn from key stakeholder groups.
3. Examine consistency between the case definition developed for use in large-scale surveys and the key case definition identified by subject-matter experts as being of importance for influencing stakeholder activities on work-related stress: that used in personal injury claims for work-related stress.
4. Examine problematic issues associated with the structure, interpretation and application of the personal injury case definition for work-related stress with a view to making recommendations on its development informed by an occupational health psychology perspective. These might contribute to the enhancement of consistency between this case definition and that developed for use in large-scale surveys.
5. Investigate the media representation of the case definition used in personal injury litigation for work-related stress and its possible contribution to informing activities on tackling and defining work-related stress.

6. Examine the utility of content analysis methodologies in the scientific study of case definitions for work-related stress.

Structure of the Thesis

This thesis explores the six aims described above. Chapter 1 begins with an overview of the theoretical perspective and terminology adopted in the dissertation. It then sets the thesis in its applied context by considering the research and policy imperatives for the development of case definitions for work-related stress.

Chapter 2 has its focus on the first of the thesis' aims. It presents a systematic review of the literature on the theoretical foundations and design of case definitions for work-related stress used as the basis for measurement in large-scale nationally representative workforce surveys in Britain published between 1997 and 2007. The implications of case definition design for the prevalence rates generated are highlighted. The chapter concludes by pointing to the imperative for the development of new case definitions that are underpinned by contemporary psychological stress theory and considered acceptable across stakeholder groups for use in future large-scale nationally representative surveys.

Chapter 3 takes as its starting point the conclusions of the previous chapter. A study is presented that addresses the second aim of the thesis: the identification of the structure of a case definition for work-related stress for use in large-scale nationally representative workforce surveys. The qualitative and exploratory

study is based on the views of subject-matter experts elicited through a series of interviews (n=35) and focus groups (n=2). Subject-matter experts are drawn from eight broadly defined stakeholder groups in Britain that hold a vested interest in policy and research developments as they relate to work-related stress. These include employers' representative bodies, trade unions, occupational health practitioners, occupational health psychologists, clinical and counselling psychologists, insurers, legal professionals and workplace health and safety regulatory and enforcement bodies. Through the use of a template analysis approach, a set of themes relating to elements of a case definition is identified. These include, (i) the declared experience of work-related stress, (ii) evidence of unreasonable exposure to psychosocial hazards associated with work, (iii) evidence of psychological ill-health (anxiety and depression) of equivalence to clinical morbidity, (iv) changes in work behaviour (absence) or presentation to a health professional for stress-related symptoms, and (v) the absence of negative affectivity. It is concluded that the case definition is suitable for translation into an assessment tool for use in future large-scale surveys of work-related stress. Furthermore, its use might enhance the value of those surveys in terms of the reliability and validity of the prevalence rates they generate. In this way, the case definition might facilitate the meaningful comparison of rates across surveys.

Chapter 4 addresses the third aim of the thesis. It takes as its starting point the value placed by the Health and Safety Executive on consistency of design, in so far as it might be possible, between the case definition developed in chapter 3 for use in large-scale nationally representative workforce surveys and other case definitions recognised by subject-matter experts who participated in that study

as key to informing stakeholder activities on tackling work-related stress. The study described in chapter 3 identified the case definition used in personal injury litigation for work-related stress as being of particular importance to informing stakeholder activities. Moreover, participants echoed the stance of the project commissioner that premium ought to be placed upon attempts to achieve consistency between the case definition developed for large-scale workforce survey application and that used in personal injury litigation for work-related stress. This chapter introduces the personal injury case definition for work-related stress. Its emergence is charted and structure and operation described. A mapping exercise is presented that examines consistency between the two case definitions. The study involves a comparison of the conceptual content and approach to measurement associated with each of the five elements encompassed in the case definition developed in chapter 3 and the personal injury case definition as it applies to work-related stress. The latter case definition is understood in the terms set out in the most authoritative available account of the interpretation and operation of the personal injury case definition in work-related stress claims: the sixteen practical propositions set out by the Court of Appeal in the influential case of *Hatton v Sutherland* [2002]. Implications of congruence and dissonance between the case definitions are considered and suggestions advanced for developments that might enhance consistency.

The study described in chapter 5 addresses the fourth and sixth aims of the thesis. It takes as its stimulus key results and conclusions from the preceding two chapters; namely, that (i) the personal injury case definition as it applies to work-related stress is of importance for influencing the stress management activities of employers, trades unions, insurers, legal professionals and other

stakeholder groups, (ii) there is concern among stakeholders in respect of uncertainty surrounding the structure and application of that case definition as well as calls for its reform, (iii) stakeholders place value on consistency between the personal injury case definition and that developed for large-scale survey application, and (iv) there might be scope for the enhancement of consistency between the two case definitions through development of the personal injury case definition. A study is presented that involves an examination of issues associated with the structure, interpretation and application of the personal injury case definition as it applies to work-related stress. The investigation is based upon a content analysis of all twenty eight judgments from personal injury claims for work-related stress made by the English courts between 2002 and 2007. The results provide a foundation upon which to (i) make recommendations for the development of guidance for clarification of the structure and application of the case definition, (ii) make recommendations on reform of the case definition, and (iii) consider the role of theory and empirical evidence from occupational health psychology in these activities that might serve to enhance, or at least clarify, the degree of consistency that could be achieved between the two case definitions of interest.

Chapter 6 addresses the fifth and sixth aims of this thesis. It presents a study that examines the newsprint media representation of the personal injury case definition for work-related stress and its possible contribution to informing stakeholder activities on tackling and defining work-related stress. The investigation is based on a critical discourse analysis of British newsprint articles published between 1996 and 2007. Forty two germane articles are considered, published over a twelve year period between 1996 and 2007. These are analysed using a critical discourse analytical technique that has its focus on

three elements in the text: themes evident at the headline level, lexical cohesion within headlines and stakeholder voices evident within the articles. The study reveals that personal injury litigation for work-related stress is represented (i) as financially costly to organisations, (ii) largely a public sector problem, and (iii) with little contextualising information on measures that organisations might adopt for the management of work-related stress. It is concluded that the representation may offer one explanation for why subject-matter experts in the study described in chapter 3 (i) identified the personal injury case definition for work-related stress as central to influencing stakeholder actions on tackling work-related stress and (ii) expressed desire for consistency between this case definition and that developed for use in large-scale nationally representative workforce surveys. The opportunity is also noted for occupational health psychologists to collaborate with journalists with a view towards the injection of empirically-based guidance on activities for the management of work-related stress into media reports. In this way, the mass media may present a vehicle for occupational health psychologists to familiarise a wide range of stakeholders with case definitions within a context of interventionist activities.

Chapter 7 brings together the results and conclusions from preceding chapters. The tension these reveal between research, policy and practice on the design and use of case definitions for work-related stress is discussed. The chapter considers some possible ways forward in the study of case definitions for work-related stress before concluding with a summary of the main findings of the thesis.

Parts of this thesis (chapters 2 and 3) have developed from my own work on the project commissioned and funded by the Health and Safety Executive. Although on applied research projects of this nature teamwork is necessary, all the field work and data analysis presented here are my own work and were my sole responsibility. The same applies to the theoretical and methodological arguments presented. The remaining chapters contain studies that were conceived and executed by me under the guidance of my supervisors. The studies presented in chapters 2, 3, 5 and 6 have been presented at international conferences (Houdmont, Cox & Griffiths, 2008a, 2006, 2008b, 2008c). It is my intention to prepare four of the studies contained herein for submission to peer-reviewed journals. Those described in chapters 2 and 3 are to be submitted to *Occupational and Environmental Medicine*. The publication of these two studies accords with the contractual stipulation of the Health and Safety Executive regarding the dissemination of findings from contracted research. The studies described in chapters 5 and 6 are to be submitted to the *International Journal of Law and Psychiatry* and *Sociology of Health and Illness* respectively.

ACKNOWLEDGEMENTS

Researching and writing this thesis has, at times, felt 'as a sandhill is to an old man's feet' (Sirach, 24:20). To all who have supported me I extend my thanks.

To Professor Tom Cox CBE and Professor Amanda Griffiths I extend gratitude for making possible the production of this thesis and for guiding the research process.

Thanks to Sarah for badgering me to 'get it finished' and allowing me the evenings, weekends and bank holidays to do just that. Though he may not know it, thanks are also due to Joshua for providing added incentive and timely light relief.

Thanks to Mum and Dad for stimulating and supporting my launch into occupational health psychology and for the expectation of aiming high.

To Eusebio Rial González and Karina Nielsen, thanks for helping me to maintain, as Springsteen would put it, 'a reason to believe'.

1. INTRODUCTION

This thesis concerns case definitions for work-related stress; that is, the criteria used for the identification of a person in a population as presenting a case. It has its focus on case definitions used as the basis for measurement in two related domains in the British context: large-scale nationally representative workforce surveys and personal injury litigation. Together, these contribute to informing policy and practice on tackling the challenge to occupational health presented by work-related stress. This introductory chapter begins with an outline of the theoretical perspective and terminology adopted throughout the thesis. It then sets the subject matter in its applied context by considering the research and policy imperatives for the development of case definitions for work-related stress.

1.1 Yet more research on work-related stress?

The scientific study of work-related stress has generated a vast body of literature in a relatively short space of time, raising the question of whether more research is really needed. Numerous academic papers have dedicated their opening lines to the suggestion that work-related stress is a 'hot topic', ripe for studying. However, it has also been suggested that if "the motive for doing the study is that it is a hot topic in the literature, then forget it" (John Campbell, former Editor in Chief of the Journal of Applied Psychology, cf. Kompier & Taris, 2004, p. 81). Applied to the study of work-related stress, Campbell's remark

implies that even if it is accepted that work-related stress is indeed a hot topic, there has to be additional justification for conducting research in the field. Justification might be found where further research can reveal something new and, particularly, where it has practical application. This thesis is presented with that dual aspiration.

This chapter commences with a description of the thesis' conceptual foundations in the discipline of occupational health psychology. The theoretical perspective on work-related stress and terminology adopted throughout the thesis are also described. It then locates the subject matter in its applied context through an examination of the research and policy imperatives for developments in case definitions for work-related stress.

1.2 Theoretical perspective and terminology

1.2.1 Occupational health psychology

This thesis is grounded in the discipline of occupational health psychology, a field that has its focus on the application of psychological principles and practices to questions concerning the psychological, social and organisational aspects of the dynamic relationship between work and health (Cox, Baldursson & Rial González, 2000). The field is relatively youthful, the monicker itself having been coined in 1990 (Raymond, Wood & Patrick, 1990). In the two decades that have passed since Raymond and colleagues set in motion a new discipline, occupational health psychology has grown at a rapid rate. In its short lifetime the discipline has generated a wealth of scientific knowledge on work-

related stress (Adkins, 1999) and wider organisational issues as they relate to individual and organisational health (Barling & Griffiths, 2003; Cox & Tisserand, 2006; Houdmont, Leka & Bulger, 2008; Leka & Houdmont, 2004; Macik-Frey, Quick & Nelson, 2007).

Through the advancement of research that may find application in initiatives for the promotion of the quality of working life, occupational health psychology may be considered both a scientific discipline and an applied field (Schaufeli, 2004). The association between research in occupational health psychology and occupational health policy and practice is strong: increasingly, researchers are addressing questions that have their genesis in the latter domains (Quick, 1996). The questions addressed in this thesis are not exceptional in this regard since they find their stimulus in a policy imperative identified by the British government (described in section 1.3.1). This thesis is thus presented as one small additional contribution to the development of occupational health psychology research that is embedded in practice and policy imperatives. By extension, it is hoped that the thesis may contribute to the stimulation of developments in research, policy and practice towards the enhancement of occupational health.

1.2.2 Transactional stress theory

This thesis adopts a transactional theoretical perspective on work-related stress. The approach is described in more detail in the following chapter; it is suffice to note here that it allows for the description of a stress process comprising (i) antecedent factors, (ii) cognitive perceptual processes that give rise to the emotional experience of stress, and (iii) correlates of that experience (i.e.,

health outcomes) (Cox, 1978; Cox & Griffiths, 1995; Cox & Mackay, 1981; Lazarus, 1991).

The transactional approach is consistent with the conceptualisation of work-related stress advanced by the British government through the agency of the Health and Safety Executive, the enforcement body for health and safety in Britain, as well as that of the European Commission. Consistency is important in these respects since the views of these organisations are influential and provide a basis for shaping stakeholder activities on work-related stress. The Health and Safety Executive conceptualises stress in terms of “the adverse reaction people have to excessive pressure or other types of demand placed on them” (Health and Safety Executive, 2008, p. 1). This definition draws a distinction between pressure, which can be a positive state if managed appropriately and a normal reaction to reasonable demands, and stress which can arise in response to intense, continuous or prolonged exposure to excessive pressures and can be detrimental to health. The European Commission, similarly, defines work-related stress in terms of an “emotional and psycho-physiological reaction to aversive and noxious aspects of work, work environments and work organisations. It is a state characterised by high levels of arousal and distress and often by feelings of not coping” (European Commission, 2002, p. 7).

1.2.3 Terminology

This thesis derives its terminology from the concepts and language of risk management as applied to work-related stress (Cox, 1993; Cox, Griffiths, Barlow, Randall, Thomson, & Rial González, 2000; Cox, Randall & Griffiths, 2002). In this way, research, policy and practice on work-related stress are

located within a health and safety framework that is consistent with the position of the both the British Health and Safety Executive and the European Commission.

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, are referred to throughout as *psychosocial hazards*. This is consistent with the terms (i) job characteristics, (ii) stressors, and (iii) work organisation factors, all of which appear in the literature, particularly in North American scholarly works, to describe “task and/or organizational aspects of the work process that give rise to stress and potential adverse health outcomes” (Huang, Feuerstein & Sauter, 2002, p. 299). In adherence to risk management concepts and terminology, preference is given throughout to the terms *harm* and *health outcomes* over the alternative term *strain* in reference to stress-mediated outcomes.

Distinction is made in this thesis between work-related stress and occupational stress. The former includes cases where work may have aggravated the experience of stress and associated health outcomes irrespective of original cause. Here, work may be a contributory factor but not necessarily the sole cause. This is consistent with the World Health Organization’s definition of a work-related disease as being one that is “multifactorial, when the work environment and the performance of work contribute significantly, but as one of a number of factors, to the causation of disease” (World Health Organization, 1985, p. 9). In contrast, occupational stress refers to cases where work is the sole cause of the experience of stress and associated harms. Although there will be instances where exposure to workplace psychosocial hazards constitutes the

sole cause of harm, it is presumed more common that personality states and traits, life circumstances and work factors interact to cause ill health (Cunningham, Lischeron, Koh & Farrier, 2004).

The terms *case definition* and *case* are understood in a manner consistent with their entries in the influential text *A Dictionary of Epidemiology* (Last, 2001). Thus, a case is defined as a person in the population or study group identified as having the particular disease, health disorder, or condition under investigation and a case definition as a set of diagnostic criteria that must be fulfilled in order to identify a person as a case of a particular disease.

1.3 Imperatives for developments in case definitions

This chapter began with the assertion that further research on work-related stress might only be justified where it can reveal something new and, in particular, where it has practical application. It is therefore appropriate at this point to establish the importance of the subject matter. There exists a host of powerful factors that underpin the importance of developments in the design and use of case definitions for work-related stress. A selection of policy and research imperatives is discussed below.

1.3.1 National policy

Government policy can be a powerful factor in shaping research needs. In the British context, the imperative for research on case definitions for work-related stress was given impetus by the publication of the government's strategy

statement on Revitalising Health and Safety (Department of the Environment, Transport and the Regions, 2000) and associated statement on Securing Health Together (Health and Safety Commission, 2000). These set out national targets for the reduction of work-related ill health incidence, work-related injuries and deaths, and related sickness absence, by 2010. Success criteria included a 20% reduction in ill health incidence and a 30% reduction in the number of working days lost to sickness absence.

Work-related stress was identified as a priority area within the Revitalising Health and Safety strategy. The Health and Safety Executive's Stress Programme was assigned targets that reflected the overall targets. These involved a reduction, by 2010, in the annual incidence of work-related stress by 20% and the number of working days lost to work-related stress by 30% (Health and Safety Executive, 2003).

The prominence given to work-related stress within the strategy recognised the substantial contribution it had made throughout the 1990s to ill health and absence from work. In establishing priority areas for action, data was considered from various sources; in the case of work-related stress this included the results of large-scale nationally representative workforce surveys. Specifically, the results of the 1995 Self Reported Work-Related Illness survey (SWI95: Jones, Hodgson, Clegg and Elliott, 1998) formed an important piece of evidence that led to work-related stress being identified as a priority area. Results from that survey suggested a national prevalence rate for work-related stress of 515,000 cases and indicated that the phenomenon was responsible for 6.5 million lost working days per annum.

The SWI95 findings provided baseline data against which to measure progress towards the Revitalising Health and Safety targets for work-related stress. At the time of the strategy's launch the intention was to measure progress by comparing the findings of subsequent large-scale nationally representative workforce surveys against the SWI95 data. However, soon thereafter it became apparent that inconsistency in the design of case definitions used in such surveys as the basis for measurement, along with other shortcomings in the evidence base, contributed to the generation of unreliable estimates of the scale of the problem. This made it difficult to assess whether the targets were likely to be met (Health and Safety Executive, 2001b). Indeed, the Health and Safety Executive held that such was the unreliability of the available survey evidence that it was not possible to translate the targets given in percentage figures into numbers. In other words, it was not possible to state categorically how a 20% fall in the annual incidence of work-related stress and a 30% fall in the number of working days lost would manifest in terms of cases and days (Health and Safety Executive, 2003a). As a result of these problems, when reporting on progress towards the work-related stress targets in 2005, the Health and Safety Executive was able to report only that "it is not possible to say where levels in 2004 stand in relation to 1999. However...recent data suggests a possible worsening" (Health and Safety Executive, 2005a, p. 3).

It was this problem that led the Health and Safety Executive to commission the studies presented in the two chapters that follow. Together, these concern (i) an investigation into whether there is inconsistency in the design of case definitions for work-related stress used in large-scale nationally representative workforce surveys in Britain and the implications of inconsistency, should it exist, for the prevalence rates generated by those surveys and (ii) the development of a

framework for a work-related stress case definition for use in future government-commissioned surveys.

The policy-led imperative for research developments in this area received further impetus in 2005 upon publication of the British government's Health, Work and Well-Being strategy (Department for Work and Pensions, Department of Health and Health and Safety Executive, 2005). The strategy set out a plan for improvements to the health and well-being of people of working age. As with the Revitalising Health and Safety strategy, work-related stress was identified as a priority area. The strategy actively encouraged the scientific community to engage in research on issues of work and health towards the production of a sound evidence base to support new initiatives for the promotion of occupational health.

This section has illustrated how government policy can drive research needs. Specifically, it has shown how problems faced by policy-makers in measuring progress towards national targets for the reduction of work-related stress might be addressed through research on the development of case definitions.

1.3.2 European policy

Beyond the British context, policy at the European level can be identified that provides an impetus for research developments on case definitions for work-related stress. One of the earliest authoritative statements on work-related stress issued by the European Commission can be found in its report on Work-Related Stress in Member States of the European Union (European Commission, 1997). The report called for a programme of research to advance knowledge

with a focus on five areas, the first two of which have a bearing on the imperative for developments in case definitions for work-related stress. These stipulated that research should concentrate on:

- *“Development of methods. The development of valid and reliable methods for use in the field of job stress is of vital importance for all types of surveys, research and evaluations...Particular emphasis should be placed on careful validation of the questionnaire instruments in the European countries.*
- *Descriptive studies. The purpose of such studies is to describe the prevalence and distribution of work stressors and their consequences in the EU countries” (p. 16).*

This call for research was reiterated, and the imperative for such research reaffirmed, in the European Commission’s Green Paper on Improving the Mental Health of the Population: Towards a Strategy on Mental Health for the European Union (European Commission, 2005). The Green Paper identified the workplace as central to preventative actions for the promotion of health and identified work-related stress an important area for prioritisation. It was welcomed by the European Parliament which noted a need for a commitment to the harmonisation of indicators of the scale of mental health problems across Europe with a view to facilitating cross-border data comparisons (European Parliament, 2006): a call that has implications for the development of standardised case definitions for work-related stress that may be used in surveys throughout Europe.

The subsequent European Commission communication, *Improving Quality and Productivity at Work: Community Strategy 2007-2012 on Health and Safety at Work* (European Commission, 2007), noted a rise in psychological illness associated with stress at work and a growth in workplace psychosocial hazard exposures. In response to this problem, the communication set out targets for a 25% reduction in the incidence rate of accidents at work by 2012. To achieve these targets the Commission advocated research on, *inter alia*, improvements in approaches to the measurement of problems and assessment of progress towards the targets (through population surveys and other techniques) as well as further research on psychosocial issues. Together, these point to the need for developments in case definitions for work-related stress that may be used for surveillance purposes.

1.3.3 The research imperative

Calls for research developments in case definitions for work-related stress have emanated from within the occupational health psychology research community. Concern in respect of inconsistent case definition design, particularly in the survey context, has been evident in the academic literature on work-related stress since the early days of scientific enquiry in this area (Cox, 1978; Cox & Mackay, 1979, 1981; Kasl, 1978). Such concerns have not abated with the passage of time; the call for research advancements continues to be reiterated in the contemporary literature (Sauter, Brightwell, Colligan, Hurrell, Katz & LeGrande, 2002; Schaufeli, 2004; Smith, 20001; Smith, Johal, Wadsworth, Davey Smith & Peters, 2000).

The call for uniformity on case definitions used in occupational health psychology research has also received impetus from the equivocal findings of many stress management intervention studies. It has been suggested that provision of a consensus case definition would facilitate participant allocation to experimental and control groups in intervention studies, i.e., facilitate the separating out of cases from non-cases. This, in turn, might enhance the scientific rigour of such studies while also providing criteria on which to make judgments on the need for employee referrals to occupational health services (van Rhenen, van Dijk, Schaufeli & Blonk, 2008).

The lack of consensus surrounding case definitions for work-related stress can make researching the topic and drawing comparisons across studies difficult. It also often leads researchers to preface their studies with a note on issues surrounding the absence of agreement on a case definition for work-related stress and a description of how the construct has been operationalised in the particular study. That, after decades of research having amassed on the topic of work-related stress, researchers remain compelled to preface their articles in this way owing, in part, to the lack of well-developed case definitions, might be regarded as a failure of the discipline of occupational health psychology. At the very least, it highlights the need for further research on the development of case definitions that may be used in a scientific context.

One explanation for why research continues to be needed in this area centres on the failure of any one theoretical model of work-related stress to have dominated the literature and informed measurement activities (Smith et al., 2000). As a result of a multitude of stress theories having been advanced in recent decades, a scientific literature exists that is replete with studies which

use a host of case definitions, the design of which has been informed by various contrasting theoretical perspectives or, in some cases, no theoretical perspective. This has led to the generation of an unreliable and invalid picture across the scientific literature of the prevalence of work-related stress in populations under investigation. Some have suggested that so great is the problem created by inconsistent case definition design, that prevalence rates for work-related stress generated by large-scale surveys may offer little value for research, policy and practice and make the notion that work-related stress is a widespread problem difficult to sustain (Wainright & Calnan, 2002). Wainright and Calnan's view exists at one end of the spectrum of opinion, perhaps, but it nevertheless prompts a debate on the nature of case definitions used as the basis for the measurement of work-related stress.

1.4 Chapter summary and conclusions

This chapter has set the scene for the thesis and laid the foundations for the studies that follow. To this end, space was dedicated at the outset to describing the theoretical perspective that informs the thesis and the terminology used throughout. The chapter went on to establish the importance of the subject matter through the description of a series of policy initiatives at the national and European levels that highlighted the need for research developments in case definitions for work-related stress. The imperative for such developments stemming from within the research community itself was also considered.

Further imperatives for research in this area are discussed in chapters 5 and 7 in the context of discussions on possible ways forward in the study of case definitions for work-related stress. These include the development of:

1. the case definition used in legal claims for work-related stress with specific emphasis on personal injury litigation
2. legislative approaches to the identification and assessment of cases of work-related stress
3. individual case assessments that are suitable for administration within an organisational setting and that are consistent with the Management Standards approach to the control and prevention of work-related stress
4. the industrial injuries scheme for occupational disease compensation as it pertains to work-related stress
5. guidance for general practitioners on conducting case assessments for work-related stress

Chapter 2 builds on the foundations laid in this chapter by describing a study that finds its stimulus in the national policy imperative for developments in case definitions described in section 1.3.1. The chapter presents a systematic review of the literature on the prevalence rate for work-related stress generated by large-scale nationally representative workforce surveys in Britain. The theoretical foundations and design of the case definitions used in those surveys as the basis for measurement are also reviewed. The implications of case definition design for the prevalence rates generated are highlighted.

2. CASE DEFINITIONS FOR WORK-RELATED STRESS IN LARGE-SCALE SURVEYS IN BRITAIN: A SYSTEMATIC REVIEW OF THE LITERATURE

The prevalence estimates for work-related stress generated by large-scale nationally representative workforce surveys are important since they are used to measure progress towards national improvement targets. They are also used to inform health and safety policy and policy-related initiatives. To achieve a reliable indication of the prevalence rate across surveys it is important that a consistent approach is taken to the design of case definitions used in those surveys as the basis for measurement. This chapter has its focus on the first of the thesis' aims. It presents a systematic review of the literature on the theoretical foundations and design of the case definitions for work-related stress used as the basis for measurement in large-scale nationally representative workforce surveys in Britain published between 1997 and 2007. The systematic review allows a consideration of the implications of case definition design for the prevalence rates generated by surveys of this type. Furthermore, it provides a basis upon which to consider whether developments are required in the design of case definitions for work-related stress that may be used in future surveys.

2.1 Introduction

Section 1.3.1 described the policy imperative that exists for developments in case definitions for work-related stress that are used as the basis for measurement within large-scale nationally representative workforce surveys in Britain. That imperative, which stems from the concern of the Health and Safety Executive that variability in the design of case definitions for work-related stress used in such surveys makes it difficult to identify patterns over time (Stansfeld, Woodley-Jones, Rasul, Head, Clarke & Mackay, 2004), is briefly reiterated here to contextualise the study presented in this chapter.

It is important that trends can be accurately measured over time in order to measure progress towards the government's national improvement targets for occupational health set out within the Revitalising Health and Safety strategy (Department of the Environment, Transport and the Regions, 2000). These involve a reduction in the annual incidence of work-related stress by 20% and the number of working days lost to work-related stress by 30% by 2010 (Health and Safety Executive, 2003). The Health and Safety Executive has acknowledged that inconsistency in the design of case definitions for work-related stress used in large-scale nationally representative workforce surveys has contributed to the generation of unreliable estimates of the scale of the problem which in turn has made it difficult to assess whether the targets are likely to be met (Health and Safety Executive, 2001b, 2003a, 2005a).

It was this problem that led the Health and Safety Executive to commission the studies presented in this and the following chapter. This chapter proceeds as

follows: section 2.2 first examines the theoretical backdrop to case definitions for work-related stress used in research in occupational health psychology. An outline of theory is necessary to provide a basis for the subsequent analysis and comparison of case definitions used in large-scale nationally representative workforce surveys in Britain. This proceeds to an overview of the case definitions for work-related stress used in scholarly occupational health psychology research. The scientific study of work-related stress provides a departure point for policy-orientated activities that includes large-scale surveys. As such, the overview provides a useful benchmark against which to consider the results of the study that follows. Section 2.3 describes the aims of the study presented in this chapter: a systematic review of the literature on (i) the prevalence rate for work-related stress generated by large-scale nationally representative workforce surveys in Britain published between 1997 and 2007 and (ii) the theoretical foundations and design of the case definitions used in those surveys as the basis for measurement. Section 2.4 presents the systematic review methodology and results are presented in Section 2.5. The prevalence of work-related stress in Britain as established through the available surveys is described as is the design of case definitions for work-related stress used in those surveys. Section 2.6 considers the implications of the theoretical foundations and design of the case definitions for the prevalence rates generated by the surveys in which they are used. The chapter concludes with the suggestion that the findings of the systematic review provide a basis upon which to consider whether developments are required in the design of case definitions for work-related stress that may be used in future surveys.

2.2 Theory as a foundation for case definitions

It is reasonable to assume that the design of case definitions for work-related stress used in large-scale nationally representative workforce surveys should be informed by contemporary theoretical knowledge and understanding of the construct. That being the case, an overview of theoretical models can provide a useful basis for the subsequent analysis and comparison of case definitions used in such surveys.

This theoretical overview does not set out to provide a comprehensive account of the evolution of work-related stress theory. Rather, the dominant theoretical perspectives that appear in the scientific occupational health psychology literature are described and critiqued. This provides a basis upon which to analyse the case definitions used in large-scale nationally representative workforce surveys in Britain and to consider their relative merits and demerits.

2.2.1 Early theoretical perspectives on work-related stress

Work-related stress theory has evolved at a rapid rate since the middle of the twentieth century. At different points in time particular models have found favour within research endeavours. Such has been the rate of development that a situation now exists whereby no single theory dominates contemporary work-related stress research. Rather, the construct appears to be conceptualised in accordance with each researcher's theoretical preference, as evidenced by the vast array of theoretical positions adopted in the peer-reviewed scientific literature.

It is possible that lack of scientific consensus on the conceptualisation of the work-related stress construct has derived, in part, from Selye's (1956) original borrowing of the term 'stress' from the discipline of engineering, where it describes an external force¹ (Jex, Beehr & Roberts, 1992). That initial borrowing of nomenclature generated debate which has persisted into the contemporary study of work-related stress (Levi, 1998); debate that has engendered the term with "so many different meanings that it is confusing, elusive, and heard so often its meaning is frequently distorted and its implications taken for granted" (Arthur, 2005, p. 274). Confusion over the term has led to the use of various forms of case definition in the academic literature, not all of which have been grounded in empirically supported theory.

Although the rapid evolution of work-related stress theory has generated a scientific study that is disparate in its theoretical conceptualisation of the construct, most research is now guided by the psychological family of theories that conceptualise stress in terms of the dynamic interaction between a person and their environment. Few contemporary studies ascribe to the principles of early stimulus-response theories. This family of theories is comprised of engineering models (stimulus-based) that conceptualise stress as an aversive and noxious characteristic of the work environment, and physiological models (response-based), pioneered by Selye (1956), that consider stress to be the physiological effects of exposure to an aversive stimulus. The stimulus-response theories have been widely criticised for (i) their inability to account for existing data through acknowledgement of individual difference (cognitive) and context

¹ Selye later acknowledged that his decision to borrow the term 'stress' had been ill founded. This he attributed to his poor grasp of the English language during the early stages of his career. Later, Selye suggested that, with hindsight, he should have used the word 'strain'. This term, too, has been used in different ways within the work-related stress literature. As such, it is likely that confusion over terminology would exist no matter which term Selye had adopted at the outset of his studies!

factors (Cox and Griffiths, 1995) and (ii) their implicit suggestion that a certain level of stress might be good for workers; an implication responsible for some undesirable approaches to the management of work-related stress (Cox & Griffiths, 1995; Le Fevre, Metheny & Kolt, 2003). Furthermore, it has been suggested that the focus on individual responses within the physiological approach has led to a narrowing of focus within stress management activities; a perspective which may encourage interventions which “concentrate on individuals and their responses to stress independent of the organisational context within which the problem occurs” (Cox & Griffiths, 1995, p. 787).

2.2.2 Contemporary theoretical perspectives on work-related stress

The contemporary psychological theories of work-related stress have five main features that set them apart from their predecessors and that have important implications for the design of case definitions used in research. Namely, psychological theories (i) recognise and accommodate worker cognitions (i.e., what the worker perceives in the work environment is important rather than its objective state), (ii) conceptualise the individual as being active in the stress process (e.g., they may mobilise coping resources in response to problems), (iii) recognise that individual differences have a role to play in the stress process, (iv) may include feedback and feed-forward loops, and (v) conceptualise stress as a negative emotional state with associated (and potentially multiple) causes and consequences (i.e., cognitive, behavioural and physiological) that are dependent on the person’s perceptions and cognitions (Randall, 2002).

These contemporary psychological theories fall into two categories: architectural (interactional) models and process (transactional) models. Both have their focus

on the interaction between the individual and the environment but whereas interactional models focus on the structure of that interaction, transactional models focus on how the interaction unfolds. Each of these categories of theory is briefly described and critiqued below.

2.2.3 Interactional stress theory

Much of the contemporary research on work-related stress has been guided by two leading interactional models: Karasek's (1979) Demand-Control (D-C) model, also known as the Job-Strain model, and Siegrist's (1996) Effort-Reward Imbalance (ERI) model. Both have been particularly dominant in studies that have sought to conceptualise and measure exposures to potentially harmful aspects of the psychosocial work environment (Stansfeld, Fuhrer, Shipley & Marmot, 1999). Indeed, so great is their dominance that, together, these models have shaped the approach of many researchers to the study of work-related stress. This is evidenced by the plethora of studies where work-related stress has been regarded in terms of psychosocial hazard exposure in accordance with the D-C and ERI concepts (e.g., Kawamaki, Haratini & Araki, 1992; Mino, Shigemi, Tsuda, Yasuda & Bebbington, 1999; Morita & Wada, 2007; Penney & Spector, 2005; Siegrist & Rodell, 2006; Tsutsumi, Kayaba, Theorell & Siegrist, 2001; Wang, 2005; Wang & Pattern, 2004).

The D-C model has its focus on the interaction between objective pressures in the work environment and the worker's decision latitude (Karasek, 1979; Karasek & Theorell, 1990). The model allows for four job types: 'high strain' jobs (the most risky to health) that involve a combination of high demands and low levels of control/resources to deal with those demands, 'active jobs'

characterised by high levels of demands alongside high levels of control (less risky to health, involving average levels of job strain), 'low strain jobs' involving low levels of demands allied with high levels of control (below average levels of job strain), and 'passive jobs' characterised by low levels of both demands and control (the demotivating nature of this job type might induce average levels of job strain). The emphasis within the model is on the status of the psychosocial work environment rather than the individual. The D-C model was later extended to incorporate the buffering effects of occupational social support, thereby creating the D-C-S or 'iso-strain' model (Johnson & Hall, 1988).

Despite its widespread application, the D-C(-S) model has been criticised on various grounds. Concern has been expressed in respect of (i) ambiguity surrounding the conceptualisation and operationalisation of the decision latitude construct (Beehr, Glaser, Canali & Wallwey, 2001; Peter & Siegrist, 1997), (ii) the nature of the interaction between demand and control (De Lange, Taris, Kompier, Houtman & Bongers, 2003; Taris, 2006; Van Der Doef & Maes, 1999), (iii) the applicability of the theory in terms of different health and health-related outcomes (Cox, 1993), (iv) the narrow focus on just two, albeit key, psychosocial hazards (Huang, Feuerstein & Sauter, 2002; Sparks and Cooper, 1999), (v) the direction of causation between demands and health (De Lange, Taris, Kompier, Houtman & Bongers, 2004; Tucker, Sinclair, Mohr, Adler, Thomas & Salvi, 2008), and (vi) its failure to consider external factors that may impact upon worker well-being including globalisation, free market forces, technological and environmental demands (Wallis & Dollard, 2008). Additionally, there is evidence to suggest that the model may not apply in its traditional form in non-Western cultures (Nomura, Nakao, Karita, Nishikitani & Yano, 2005).

Nevertheless, the evidence for the demand-control model is convincing when cardiovascular disease and sickness absence behaviour outcome measures are considered (Belkic, Landsbergis, Schnall & Baker, 2004; Kivimaki, Virtanen, Elovainio, Kouvonen, Vaananen & Vahtera, 2006; Peter & Siegrist, 1997). In Britain, the longitudinal Whitehall II study involving some 10,000 civil servants has generated a wealth of robust evidence concerning the ability of the model to predict coronary heart disease (Bosma, Peter, Siegrist & Marmot, 1998; Marmot, Bosma, Hemingway, Brunner & Stansfeld, 1997; Stansfeld & Marmot, 2002), sickness absence (North, Syme, Feeney, Shipley & Marmot, 1996) and psychiatric disorder (Stansfeld et al., 1999). Furthermore, a meta-analysis of longitudinal studies found consistent and robust evidence on the combination of high demands and low decision latitude as a prospective risk factor for common mental health problems (Stansfeld & Candy, 2006). The ability of the model to predict heavy drinking and psychological health has been shown to increase when internal resources in the form of problem and emotion-focused coping are considered (Kjaerheim, Haldorsen & Anderson, 1997; Noblet, Rodwell & McWilliams, 2006). There is also evidence to suggest that the addition of social support to the model was well-founded: one review of longitudinal studies that examined the relationship between psychological work demands and depression found that social support at work was consistently associated with a decreased risk of for future depression (Netterstrom, Conrad, Bech, Fink, Olsen & Rugulies, 2008).

The second of the interactional models considered here, ERI theory, holds that stress develops as a result of an imbalance between effort expended and rewards received (Siegrist, 1996). Both effort and reward are broadly conceptual. Imbalance is moderated by personal factors. Rooted in the notion of

distributive justice, the theory suggests that effort at work is spent as part of a social contract based on the norm of social reciprocity whereby effort is reciprocated through rewards provided in the form of money, esteem, and career opportunities (including job security). Lack of reciprocity between costs and gains defines a state of emotional distress with a propensity to stress responses. Recurrent violation of the norm of reciprocity may elicit a sense of being treated unfairly and suffering injustice which affects a worker's self-esteem. Imbalance between efforts and rewards can arise under three conditions: where an employee (i) has a poorly defined work contract or where that employee has little choice concerning alternative employment opportunities owing to, among other things, difficult labour market conditions or lack of mobility, (ii) accepts the imbalance for strategic reasons such as the prospect of improved future working conditions, and (iii) exhibits over-commitment as a means of coping with occupational demands, whereby over-commitment is defined as "a set of attitudes, behaviors and emotions that reflect excessive striving in combination with a strong desire of being approved and esteemed" (Siegrist, 2001, p. 55). Over-committed employees tend to inappropriately perceive their work-related demands and personal coping resources due to a perceptual distortion which prevents them from making accurate assessments of efforts and rewards (Siegrist, 2002).

The model has proven capable of predicting stress-related health outcomes including psychosomatic complaints, emotional exhaustion, physical health symptoms and job dissatisfaction (de Jonge, Bosma, Peter & Siegrist, 2000), psychiatric morbidity (Kivimaki, Vahtera, Elovainio, Virtanen & Siegrist, 2007; Stansfeld et al., 1999) and coronary heart disease (Kivimaki et al., 2006; Kuper, Singh-Manoux, Siegrist & Marmot, 2002; Peter, Alfredson, Hammar et al.,

1998). A number of reviews on health outcome research associated with effort-reward imbalance are available (e.g., Perrewe & Ganster, 2002; Schnall, Belkic, Landsbergis & Baker, 2000; Stansfeld & Marmot, 2002; Tsutsumi & Kawakami, 2004; van Vegchel, de Jonge, Bosma & Schaufeli, 2005) and a meta-analysis of longitudinal studies found consistent and robust evidence for the combination of high effort and low reward as a prospective risk factor for common mental health problems (Stansfeld & Candy, 2006). There is also growing empirical support for the importance of over-commitment within the model. Studies have shown over-committed academics working in universities in the United Kingdom to be more likely to display psychological and physical health symptoms (Kinman & Jones, 2008a) and higher levels of work-life conflict (Kinman & Jones, 2008b) than their non-over-committed counterparts. However, support for the theory is not universal; some studies have found no effect at all (van Vegchel, de Jonge, Meijer & Harners, 2001). Presented some seventeen years after the D-C model, the ERI model has, thus far, received less research attention than the former (Huang et al., 2002), although that pattern appears to be changing.

Together, these two interactional theories offer a straightforward and robust theoretical anchor point from which to develop refinements to the models in order to better account for the experience of work-related stress (Uhmann, 2007; van Veldhoven, Taris, de Jonge & Broersen, 2005). The conceptual development of interactional models has proceeded with examples such as the Demand-Induced Strain Compensation (DISC) model (de Jonge & Dormann, 2003) that seeks to integrate the DC and ERI models into a single framework; the Job Demands-Resources (JDR) model (Bakker, Demerouti, Taris & Schreurs, 2003) and the Demand-Skill-Support model (van Veldhoven et al., 2005). These

models share two characteristics: a firm theoretical underpinning and recognition that personality, personal agency and personal resources all play a role (Schaufeli, 2004).

2.2.4 Transactional stress theory

In terms of theoretical sophistication, it is generally accepted that the interactional models have been supplanted, or at least supplemented, by transactional theories (Griffiths & Cox, 1998; Cox, Griffiths & Rial González, 2000; Cox et al., 2000). These define stress in terms of the dynamic process that represents the on-going and ever changing relationship between the person and their work environment. This process comprises three interrelated aspects: (i) antecedent factors, (ii) cognitive perceptual processes that give rise to the emotional experience of stress, and (iii) correlates of that experience (i.e., health outcomes) (Cox, 1978; Cox & Griffiths, 1995; Cox & Mackay, 1979, 1981; Griffiths & Cox, 1998; Lazarus, 1991)

The transactional perspective integrates structural aspects of the interactional approach with a process-based account of stress through a consideration of the psychological mechanisms that underpin a person's interaction with the work environment. In this way, transactional models remain largely consistent with their interactional predecessors.

The strength of transactional theory lies in its account of the dynamic relationship between the individual and his or her work environment and the experience of stress within this relationship as a mediator between psychosocial hazard exposure and health. Importantly, transactional theory accommodates

subjective experience in a way that models which regard stress simply as an environmental threat do not. Within transactional theory the emphasis is upon the individual's subjective appraisal of the environment, taking into consideration available coping resources. Indeed, the word 'transaction' implies that "stress 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, p. 3).

Transactional theory recognises that stress can be made manifest in physiological, psychological, behavioural, and social terms. It also recognises that a degree of individual variation will exist due to stress being a process of transaction between the person and the environment. In doing so it explains why conditions that one person experiences as stressful may not be regarded as stressful by another.

Furthermore, the approach takes account of multiple variables in the stress process. As such, studies that adhere to the perspective necessarily collect data on a host of factors that feed into the stress process: hazardous exposures, the meaning of those exposures to the individual and that person's coping resources as well as outcome variables. When operationalised as a case definition in scientific studies, this process-based approach is more labour intensive for both researcher and study participant than interactional stress theory. In consequence, studies informed by transactional stress theory are fewer in the scientific literature than those guided by the interactional models. This serves to highlight one of the major challenges associated with transactional stress theory: the complexity of its application.

2.2.5 Case definitions in the scientific study of work-related stress: Design informed by theory?

The above overview of the dominant psychological models of work-related stress offers a foundation upon which to examine whether these theoretical models have informed case definition design in the scientific study of work-related stress. It is to such an examination that this section now turns. Scientific research on work-related stress provides a benchmark and departure point for policy-orientated activities that includes large-scale nationally representative workforce surveys. As such, this overview provides a useful benchmark against which to consider the results of the study that follows.

Scientific studies on work-related stress have incorporated various case definitions, the design of which has been informed by a host of theories. Choice of case definition may reflect researchers' differing theoretical conceptualisations of the work-related stress construct (DeFrank, 1988). The literature reveals variance across studies in the interpretation of theory for the purpose of informing case definition design. Some case definitions reveal reliance on overly-simple interpretations of theory (Kendall, Meunchberger & O'Neill, 2003). Others have neglected theory altogether (Lazarus, 1990). Where researchers have stated the theoretical model that guides the design of a case definition used in a study, it does not necessarily follow that the approach to measurement is consistent with that of other studies which have ostensibly adopted a case definition informed by the same model (Kivimaki et al., 2006). This is a problem that has manifested across the occupational health psychology literature. As Kompier and Taris (2004) have noted: "Too often authors seem to believe that their operationalizations are identical to the higher order constructs

they aim to reflect" (p. 82). Kompier and Taris illustrate this problem with the example of the hypothetical study that claims to measure job demands through assessment of the hardness and speed of work but that, in doing so, fails to consider other aspects of demand such as difficulty or the emotional dimension.

The inconsistent design of case definitions based on the popular D-C and ERI models may have arisen, in part, out of ambiguity concerning the nature and meaning of interactions between variables in the models (Van Vegchel et al., 2005). Such inconsistencies may have impaired the ability of researchers to draw comparisons across studies, a problem that could be minimised if researchers wishing to adhere to specific theoretical models consistently used approved questionnaires such as the Job Content Questionnaire (Karasek, Brisson, Kawakami, Houtman, Bongers & Amick, 1998) for the D-C model and ERI Questionnaire (Siegrist & Peter, 1996) for the ERI model. However, it does not appear that authorised questionnaires have been used consistently in organisational research. This may be due to the need for measures that can be administered, completed and scored expediently and difficulties in obtaining access to approved questionnaires.

Cross-study comparisons are further hampered by the development and use of bespoke case definitions for individual studies (e.g., Bradley, 2007; Daniels, Tregaskis & Seaton, 2007; Mohr, 2000). Some researchers have also applied somewhat aged case definitions that contain little or no reference to contemporary stress theory (see, for example, Elangovan & Xie, 1999; Sosik & Godshalk, 2000). Two anecdotal points are worthy of note here. First, it appears that researchers who have eschewed contemporary operationalisations of work-related stress tend not to be applied psychologists but, rather, originate from

business management and administration backgrounds. This perhaps raises a question about the efficacy of the efforts of occupational health psychologists to disseminate knowledge about theoretical developments outside the restricted confines of their immediate community. Second, failure to apply case definitions based on contemporary stress theory appears to be no barrier to publication in some leading journals.

Variety in the design of case definitions used in scientific studies is further complicated by the fact that many of the theoretical models that inform the design of those case definitions encompass their own unique terminology. As a result, assorted terms appear across the literature to refer to the constituent elements of the work-related stress experience. The situation is compounded by differences in terminological preferences being evident across geographical regions as well as the cultural and philosophical heritage of an international community of researchers drawn, as they are, from psychology, medicine, sociology and management, among other disciplines (Le Fevre et al., 2003). Calls have been made for the scientific community to use concrete and standardised terms in work-related stress research (Huang et al., 2002; Jex et al., 1992), but differences persist. For example, the term *stress* has been used variously to refer to external influences acting on individuals, physiological reactions to such influences, psychological interpretations of external influences and adverse behavioural reactions (Le Fevre et al., 2003). Similarly, the term *stressor* has been applied to refer to circumstances that may lead to distress and harm, to health outcomes itself, or to both (Industrial Injuries Advisory Council, 2004). In the same way, the term *strain* has been confusingly used to refer to physical and psychological health problems as well as situations that consist of high demands and low control. Confusion and disagreement over

terminology is problematic because it inevitably filters down into the design of case definitions for work-related stress used in studies, thus further hindering cross-study comparisons.

As suggested at the beginning of this section, scientific research on work-related stress provides a benchmark and departure point for applied activities. One consequence of the terminological variance evident in the scientific literature on work-related stress is that such variance might be reflected in applied and policy-related activities. Indeed, there is evidence in the British context to suggest that the enforcement and regulatory activities of the Health and Safety Executive have demonstrated inconsistency in this respect. For example, much Health and Safety Executive documentation on work-related stress conceptualises psychosocial hazards as those aspects of the design, management and organisation of work that may be associated with the experience of stress. In contrast, a seminal Improvement Notice² handed down to an employer for failure to adequately address work-related stress in its workforce (Health and Safety Executive, 2003b), stated the contravention of statutory provisions as a failure “to make a suitable and sufficient assessment of the risks to the health and safety of your employees from exposure to work-related stressors” (p. 1). The notice went on to define stressors as “sources of work-related stress which have the potential to cause harm” (p. 2). In this example the term stressor was used synonymously with the term psychosocial hazard. Such inconsistency may unhelpfully detract from attempts to develop consensus among stakeholders on the need to tackle work-related stress as well

² An Improvement Notice may be issued by the Health and Safety Executive for contravention of a statutory duty. Where work-related stress is concerned the relevant statutory duty will typically be the Health & Safety at Work Act 1974 and the Management of Health & Safety Regulations 1999. Failure to comply with the requirements of an Improvement Notice may result in criminal prosecution.

as the development of a shared understanding of its nature, causes and consequences.

2.2.6 Summary

This section has introduced key contemporary psychological stress theories that have informed, to varying degrees, the design of case definitions used in the scientific study of work-related stress. Theoretical models, along with scientific studies, provide a benchmark and departure point for policy-related activities. As such, it might be expected that the outlined theoretical perspectives would inform the design of case definitions used in large-scale nationally representative workforce surveys. The overview of theoretical perspectives and the adoption of those perspectives in the scientific literature therefore together provide a basis for an analysis and comparison of case definitions used in such surveys.

2.3 The current investigation

Having (i) established the policy backdrop to scientific investigations into the case definitions for work-related stress used in large-scale nationally representative workforce surveys in Britain and (ii) outlined contemporary theoretical perspectives on work-related stress that provide a basis upon which to analyse and compare the case definitions used in such surveys, this chapter now presents a study that examines the first aim of the thesis. A systematic review of the literature is presented that examines (i) consistency in prevalence rates for work-related stress identified through large-scale nationally

representative workforce surveys in Britain published between 1997 and 2007 and (ii) the theoretical foundations, interpretation and operationalisation of the case definitions used in those surveys as the basis for measurement.

The systematic review allows a consideration of the implications of case definition design for the prevalence rates generated by surveys of this type. Furthermore, it provides a basis upon which to consider whether developments are required in the design of case definitions for work-related stress that may be used in future surveys of this type in order to enhance the validity and reliability of findings across surveys.

2.4 Method

2.4.1 Systematic reviews

The current review takes a systematic approach to its examination of the literature. Systematic reviews have been defined in terms of “a review of the literature that has been prepared using a systematic approach minimizing biases and random errors documented in a material and methods selection” (Chalmers, 2001, cf. Verbeek, 2007, p. 81). Sources of error and bias, in this context, may include limited searching, selective inclusion of studies, unclear unformulated questions, language restriction or unreliable extraction of data from studies (Verbeek, 2007).

The inclusion of systematic reviews in doctoral theses in occupational health and related disciplines is a relatively recent innovation and, according to a recent

editorial in the *Scandinavian Journal of Work, Environment and Health*, one that is to be encouraged (Viikari-Juntura & Burdof, 2007). The development appears sensible when one considers that published reviews are important in the acquisition of knowledge and point to possible areas of future scientific study. As Kompier and Taris (2004) have observed, “studies should build on previously gathered evidence when researching a particular topic; there is usually much more such historical evidence available than some of us acknowledge” and in that respect “review studies serve an important function in the advancement of science, showing us where we have already been and where we should go” (p. 82). It has further been suggested that systematic reviews constitute an important teaching and learning aid and, as such, their publication may widen the readership of academic journals in occupational health (Viikari-Juntura & Burdof, 2007). Thus, the current systematic review is presented not merely as a vehicle by which to introduce and contextualise subsequent chapters in this thesis but also as a discrete scientific study of value in its own right in accordance with the terms outlined by Kompier and Taris (2004).

Given the variations in systematic review methodologies, a framework was adopted for this study that was designed for the Health and Safety Executive for the identification of best available evidence in relation to policy questions in occupational health psychology and, specifically, work-related stress (Rick, Thomson, Briner, O’Regan & Daniels, 2002; Thomson, Rick, Briner, Daniels & O’Regan, 2002). The systematic review methodology is set out in Appendix I. The framework’s proven efficacy in the context of the work-related stress literature was taken as evidence of the appropriateness of its application here.

2.4.2 Identification of the literature

A search was conducted for peer-reviewed journal papers and reports published by appropriate bodies. The sources of these were the electronic databases PsychINFO, EMBASE, ASSIA and Web of Science. Reports from the Health and Safety Executive and agencies of the European Commission (the European Foundation for the Improvement of Living and Working Conditions) were also included.

Potentially relevant surveys were identified through searches for abstracts of papers that included the title script 'stress AND survey'. The search continued by using cross-references from papers and by asking experts in the field to make suggestions on possible papers for consideration.

A search of the PsychINFO database for abstracts yielded 108 papers. The search was replicated on the EMBASE, ASSIA and Web of Science databases. This yielded an additional 129 (EMBASE), 31 (ASSIA) and 225 (Web of Science) documents. In combination, the four database searches generated a total of 493 non-duplicate papers published in 100 journals. Manual searches on the publication databases of the Health and Safety Executive and the European Foundation for the Improvement of Living and Working Conditions yielded a further 13 and 4 reports respectively. The initial search results are illustrated in Table 1.

Database	Number of documents retrieved
PsychINFO	108
EMBASE	129
ASSIA	31
Web of Science	225
Health and Safety Executive	13
European Foundation for the Improvement of Living and Working Conditions	4

Table 1. Documents retrieved from title keyword search

2.4.3 Relevance and quality assessment: Inclusion criteria

Abstracts were screened, duplicates and obviously irrelevant references eliminated and full text copies obtained of papers and reports that appeared to describe surveys that met the inclusion criteria, namely that each survey (i) included a sample that was broadly representative of the national working age population rather than of a particular organisation or a profession or some other group, (ii) involved workers in Britain, (iii) included self-report measures of work-related stress, (iv) adhered to high standards of survey practice in terms of sampling, survey design and administration, or, where this was not made explicit, was conducted by an organisation regarded as an authority in survey research, and (v) was published between 1997 and 2007, thus offering an

illustration of contemporary prevalence rates rather than a historical perspective³.

Surveys were excluded where they (i) did not make direct reference to work-related stress (for example, where depression or anxiety and psychosocial hazard exposures were assessed without attempt at establishing links that would permit conclusions on the work-relatedness of symptoms) and (ii) reported duplicate data provided elsewhere (where this was the case the more detailed of the available papers or reports was retained).

2.4.4 Review of the literature for evidence

Review criteria were developed to extract details from each paper and report that had successfully passed through the initial sifting of the literature for quality and relevance. A proforma was developed for this purpose that addressed details of the study populations, estimates of the scale of work-related stress and the case definitions used. To identify the very best studies among those that have fulfilled relevance and quality assessment criteria, systematic reviews have often applied quality ratings to each (usually low, medium and high or star ratings) (e.g., Lamontagne, Keegel, Louie, Ostry & Landsbergis, 2007). The current investigation sought to examine case definitions and prevalence rates in *all* surveys that met quality and relevance criteria, thus the application of quality ratings was unnecessary.

³ A ten year review period is commonly applied and deemed acceptable in reviews of the occupational health scientific literature. See, for example, Crawford & Laiou (2007).

2.5 Results

2.5.1 Results of the search

The search yielded 510 papers and reports for possible inclusion in the systematic review. Application of the quality and relevance inclusion criteria permitted the identification of 15 studies that could be submitted to detailed interrogation. The attrition rate reflects the paucity of publications relating to large-scale nationally representative workforce surveys on work-related stress in Britain.

Explanation is required for the omission of publications concerning three particular data sources: the Whitehall II study (Ferrie, 2004), the Psychiatric Morbidity Surveys of Great Britain (Singleton, Bumpstead, O'Brien, Lee & Meltzer, 2001) and the Health Survey for England (Bennett, Dodd, Flatley, Freeth & Bolling, 1993) survey series. Whitehall II, which began in 1985 to explore what may underlie the social gradient in death and disease and has continued for more than two decades, is not included here for two reasons. First, the Whitehall II sample comprised solely of civil servants and thus failed to meet the criteria of being broadly representative of the national working population. Second, although some of the Whitehall II studies addressed relationships between various combinations of psychosocial hazard exposures and health indices, explicit reference to work-related stress was not made in published papers (e.g., Stansfeld, Fuhrer, Shipley & Marmot, 1999). The Psychiatric Morbidity Survey series was likewise omitted on the basis that it involved the assessment of common mental disorders as opposed to direct consideration of work-related stress. Similarly, the Health Survey for England

series which has involved the assessment of constructs associated with work-related stress such as job-strain (a measure comprising perceived demands and control), mental ill-health and job characteristics without explicit reference to work-related stress.

2.5.2 The prevalence of work-related stress

The surveys included in the review each provided an estimate of the prevalence of work-related stress in the British workforce. The surveys were published over a ten year period (1997-2007) and covered a twelve year period of data collection (1995-2007). Precise rates varied across surveys. Findings, listed by survey series, are summarised overleaf in Table 2.

Each survey series demonstrated internal consistency in terms of the prevalence rates generated. The six Self-Reported Work-Related Illness (SWI) surveys produced prevalence rates in the range of 0.4%-1.5%. The four Psychosocial Working Conditions in Great Britain (PWC) surveys yielded prevalence rates in the range of 12%-16.5%. The European Working Conditions (EWC) surveys produced broadly stable prevalence rates between 22.6% and 27%, with the exception of one survey that produced an anomalous rate of 11.8%. Two surveys did not form part of a series, each having been administered on one occasion: the Workplace Health and Safety Survey (WHASS) which produced a prevalence rate of 12% and the Bristol Stress and Health at Work (SHAW) study which produced a prevalence rate of 20%. Overall, the surveys clustered into three groups in terms of the prevalence rates they generated: (i) SWI; (ii) PWC, WHASS, SHAW; (iii) EWC. Details of prevalence rates for each cluster of surveys are presented below.

Survey name	Author	Publication date	Work-related stress prevalence rate	Case definition type	Sample	Screening question Y = yes N = no
Self-reported Work-related Illness survey series						
Self-reported Work-related Illness in 2005/06 (SWI05/06)	Health and Safety Executive	2007	Stress, depression or anxiety was reported by 1.0% of respondents.	Perceived health status	80,109	Y
Self-reported Work-related Illness in 2004/05 (SWI04/05)	Jones, Huxtable & Hodgson	2006	Stress, depression or anxiety was reported by 1.2% of respondents.	Perceived health status	83,272	Y
Self-reported Work-related Illness in 2003/04 (SWI03/04)	Jones, Huxtable & Hodgson	2005	Stress, depression or anxiety was reported by 1.3% of respondents.	Perceived health status	85,109	Y
Self-reported Work-related Illness in 2001/02 (SWI01/02)	Jones, Huxtable, Hodgson & Price	2003	Stress, depression or anxiety was reported by 1.3% of respondents.	Perceived health status	93,427	Y
Self-reported Work-	Jones, Huxtable	2001	Stress, depression or	Perceived health status	65,048	Y

related Illness in 1998/99 (SWI98/99)	& Hodgson		anxiety (plus heart disease/attack or other circulatory problem attributed to stress) was reported by 1.5% of respondents.			
Self-reported Work-related Illness in 1995 (SWI95)	Jones, Hodgson, Clegg & Elliott	1998	Stress, depression or anxiety was reported by 0.4% of respondents.	Perceived health status	39,863	Y
Psychosocial Working Conditions in Great Britain survey series						
Psychosocial Working Conditions in Great Britain in 2007 (PWC07)	Webster, Buckley & Rose	2007	13.6% of the sample reported high or extremely high levels of stress at work	Single item	2,171	N
Psychosocial Working Conditions in Great Britain in 2006 (PWC06)	Health and Safety Executive	2006	12% of the sample reported high or extremely high levels of stress at work	Single item	2,515	N

Psychosocial Working Conditions in Great Britain in 2005 (PWC05)	Health and Safety Executive	2005b	15% of the sample reported high or extremely high levels of stress at work	Single item	1,476	N
Psychosocial Working Conditions in Great Britain in 2004 (PWC04)	Health and Safety Executive	2004	16.5% of the sample reported high or extremely high levels of stress at work	Single item	1,727	N
European Working Conditions survey series						
Fourth European Working Conditions survey (EWC4)	Parent-Thirion, Macías, Hurley & Vermeylen	2007	11.8% of the British sample reported that their work gave rise to stress	Perceived health status	UK sample approx. 1,000	Y
Third European Working Conditions survey (EWC3)	Paoli & Merllie	2001	22.6% of the British sample reported that their work gave rise to stress	Perceived health status	1,514	Y
Second European Working Conditions survey (EWC2)	Paoli	1997	27% the British sample reported that their work	Perceived health status	1,066	Y

			gave rise to stress			
Workplace Health and Safety Survey						
Workplace Health & Safety Survey (WHASS05) 2005	Hodgson, Jones, Clarke, Blackburn, Webster, Huxtable & Wilkinson	2006	12% of the sample reported high or extremely high levels of stress at work	Single item & Perceived health status	10,016	Y
Bristol Stress and Health at Work study						
Bristol Stress and Health at Work Study (SHAW)	Smith, Johal, Wadsworth, Davey Smith & Peters	2000	20% of the sample reported high or extremely high levels of stress at work	Single item	4,135 (currently in employment)	N

Table 2. Prevalence rates and case definitions in large-scale surveys of work-related stress incorporating British samples

Cluster 1: Self-Reported Work-Related Illness (SWI) survey series

The Self-Reported Work-Related Illness (SWI) survey series has contributed to the generation of official prevalence data on work-related stress in Britain since 1990. The first survey (SWI90: Hodgson, Jones, Elliot & Osman, 1993) is not considered here since its publication predates the period under investigation.

The six SWI surveys generated a consistent set of prevalence estimates. 0.4% of respondents in SWI95 reported having experienced stress, depression or anxiety caused or made worse by work. 1.5% of respondents in SWI98/99 reported having experienced stress, depression or anxiety (plus heart disease/attack or other circulatory problem attributed to stress) caused or made worse by work. Stress, depression or anxiety caused or made worse by work was reported by 1.3%, 1.3%, 1.2% and 1.0% of respondents in SWI01/02, SWI03/04, SWI04/05 and SWI05/06 respectively.

Cluster 2: Workplace Health and Safety Survey (WHASS); Psychosocial Working Conditions (PWC) survey series; Bristol Stress and Health at Work (SHAW) study

The Health and Safety Executive commissioned all three surveys considered here: the Workplace Health and Safety Survey (WHASS), the Psychosocial Working Conditions (PWC) survey series and the Bristol Stress and Health at Work (SHAW) study. The WHASS survey, conducted in 2005, revealed that 12% of employees found their job to be extremely or very stressful. Consistent with this, 16%, 15%, 12% and 13.6% of respondents reported their job to be extremely or very stressful in the 2004, 2005, 2006 and 2007 PWC surveys

respectively. The SHAW survey, conducted in 1998, revealed that almost 20% of respondents rated their work as extremely or very stressful.

Cluster 3: European Working Conditions (EWC) survey series

The European Working Conditions survey is conducted periodically by the European Foundation for the Improvement of Living and Working Conditions. It aims to provide an overview of the state of working conditions in the European Union and to identify the nature and content of changes facing the workforce and the quality of working life. According to this survey series, the prevalence of work-related stress in Britain has gradually fallen in the period 1997-2007. The first of the four surveys (Paoli, 1992) is not considered here because its publication date predates the period under investigation. In the second survey (published 1997), 27% of the British sample reported that their work gave rise to stress. The British prevalence estimate generated by the third survey (published 2001), showed a fall to 22.6% which dropped to 11.8% by the fourth survey (published 2007).

2.5.3 Case definitions

Two contrasting families of case definition for work-related stress were used in the fifteen surveys. The case definition characteristics are summarised in Table 2.

Single item case definitions

Six of the surveys used a single-item case definition whereby respondents were asked to indicate the degree to which they found their job stressful on a five

point scale that ranged from 'not at all stressful' to 'extremely stressful' (PWC07, PWC06, PWC05, PWC04, WHASS, SHAW). This group of surveys corresponded to the second cluster of prevalence rates (12%-20%).

Case definitions based on perceived health status

Ten of the surveys used a case definition that required respondents to indicate from a list of symptoms (which included 'stress' or 'stress, depression or anxiety'), how work had affected their health. Surveys that used this type of case definition included the Self-Reported Work-Related Illness (SWI) surveys, the European Working Conditions (EWC) surveys and the Workplace Health and Safety Survey (WHASS) (which also included a single-item case definition). This group of surveys did not correspond to any single cluster of prevalence rates; rather, the ten surveys fell across the three clusters: SWI = cluster 1, WHASS = cluster 2, EWC = cluster 3.

All of the case definitions based on perceived health status were preceded by a screening question to identify respondents who believed that work had affected their health in some way. This required an affirmative response to a question such as '*Does your work affect your health?*' to trigger a further set of questions concerning the way in which health (including 'stress' or 'stress, depression or anxiety') had been affected by work.

2.6 Discussion

This systematic review has examined the prevalence rate for work-related stress generated by large-scale nationally representative workforce surveys in Britain. It has also explored the theoretical basis and design of case definitions for work-

related stress used in those surveys as the basis for measurement. This discussion examines the extent to which contemporary psychological stress theory has informed the design of the case definitions used in these surveys and the possible implications of case definition design for the prevalence rate generated.

2.6.1 Case definitions based on perceived health status

The fifteen surveys that fulfilled the inclusion criteria generated three clusters of prevalence rates: cluster 1 (0.4%-1.5%); cluster 2 (12%-20%); cluster 3 (20%-27%). All the surveys in the first and third clusters used case definitions that examined perceived health status. This conceptualisation of stress as a symptom of ill health is consistent with the response-based theoretical perspective described previously in section 2.2.1 (Selye, 1950, 1956).

The case definitions used in the surveys within the first and third cluster were also preceded by a screening question. These were generally consistent with that used in SWI98/99: *Within the last twelve months have you suffered from any illness, disability or other physical or mental problem that was caused or made worse by your job or work done in the past?* The screening question required respondents to consider a link between the nature of their work and their health. In this way the screening question introduced a psychological dimension to the theoretical structure of the case definition that centred on the dynamic interaction between the worker and his work environment (Cox & Griffiths, 1995).

It has been accepted by the designers of the SWI survey series that the precise wording used in a screening question might have an impact on the responses given (Jones et al., 2003) and, as such, affect the prevalence rate obtained. This point is particularly pertinent in respect of work-related stress in view of the fact that the SWI surveys prior to SWI98 made no reference to mental problems in their screening questions. Further research is warranted to advance understanding on the effects of screening questions within survey-based case definitions for work-related stress.

Despite the theoretical similarities of the case definitions used, these two clusters of surveys generated contrasting prevalence rates. One explanation for this might be in the wording of the case definition: the EWC surveys (cluster 3) required respondents to indicate whether their work had affected their health in terms of 'stress'. The SWI surveys (cluster 1) considered 'stress, depression or anxiety' together. Respondents were more likely to indicate that their work had caused them 'stress' than 'stress, anxiety or depression'. It is probable that respondents were inclined to interpret that latter, which included reference to recognised psychiatric disorders, as referring to severe health outcomes (perhaps of equivalence to clinical morbidity) whereas the former, which made no such references, might have been more commonly interpreted as referring to less severe symptoms. On this basis it would be expected that the number of respondents who indicated their work had caused them 'stress' would be greater than that who indicated their work had caused them 'stress, anxiety or depression'. Evidence to support this possible explanation can be found in studies that have examined the impact of question wording on responses in surveys of work-related stress (Jex et al., 1992). An alternative explanation may lie in differences in survey design and administration. Further research is

warranted to establish which of these explanations (or others) might best account for the incompatible prevalence rates generated by these survey series.

2.6.2 Single-item case definitions

All the surveys in the second cluster (PWC, WHASS, SHAW) used a single-item case definition, described as “a crude...surrogate indicator of job stressfulness” (Health and Safety Executive, 2006, p. 16), that required respondents to make a judgement on the nature of their job. In this way, the case definition might be considered consistent with the early stimulus approach to the study of stress that conceptualised stress as a characteristic of the person’s environment.

On the basis of the current findings it may be concluded that the stimulus-based approach to case definition design generates a consistent prevalence rate between 12% and 20%. This rate contrasts with that yielded by response-based case definitions based on perceived health status. One explanation for this inconsistency may be found in the possibility that, when used in large-scale surveys, the single-item case definition provides an estimate of the number of people exposed to the work-related stress stimulus whereas case definitions based on perceived health status provide an estimate of the number of people who consider work-related stress to have impacted upon their health (Health and Safety Executive, 2002).

Since the early days of survey research on work-related stress, simplistic case definitions which translate into usable and efficient survey tools have been popular (Kasl, 1978). It is therefore no surprise that the single-item case definition has appeared in the academic literature with increasing frequency in

recent years (e.g., Phillips, Sen & McNamee, 2008; Smith, Wadsworth, Moss & Simpson, 2004; Wadsworth, Dhillon, Shaw, Bhui, Stansfeld & Smith, 2007). This review has similarly revealed its popularity among contemporary survey designers. This popularity may stem from the fact that the case definition allows for the efficient collection of data (in terms of the time required for a case assessment) and from its utility where a survey is to be repeated at regular intervals (Elo, Leppänen & Jahkola, 2003).

Most researchers, however, agree that the stimulus-based theoretical perspective is outdated and fails to adequately account for the experience of work-related stress (Cox & Griffiths, 1995; Cox, Griffiths & Rial González, 2000; Kasl, 1978). Others have gone further in arguing that use of case definitions such as the type discussed here which include the term 'stress' in their assessment schedule should be avoided altogether for risk of the term influencing the responses of study participants (Jex et al., 1992). Similarly, it has been suggested that the direct single-item case definition may be susceptible to displays of demand characteristics which could explain anomalous research findings such as those which show that men in physically demanding and dangerous jobs report low levels of stress yet exhibit high levels of stress-related diseases (Holt, 1993). It has also been suggested that this type of case definition may measure a slightly different construct to that assessed within case definitions that focus on health outcomes; the latter may provide an estimate of the number of people who consider work-related stress to have impacted upon their health, whereas the direct single-item approach may provide an estimate of the number of people exposed to work-related stress (Health and Safety Executive, 2002).

Support for this position can be found in evidence which has shown that survey respondents interpret the meaning of work-related stress in line with case definition wording (Jex et al., 1992). Jex and colleagues found that the wording of some case definitions might encourage respondents to focus on their responses to psychosocial hazard exposures, whereas an alternative framing might encourage respondents to focus on perceptions of the psychosocial hazard exposures themselves. Yet other forms of wording might permit interpretation of the construct in either of these two ways. The study also found that survey respondents are most likely to interpret the word 'stress' in terms of health outcomes, primarily anxiety. This was in contrast to the interpretation of the designers of scientific studies on work-related stress who were found to be more likely to conceptualise the construct in terms of psychosocial hazard exposures. As such, there is a risk that the authors of surveys on work-related stress may understand and report findings in a way that is inconsistent with that of survey respondents.

Despite the theoretical criticisms made of the single-item case definition, its use in three of the survey series considered here (PWC, WHASS, SHAW), offered a better degree of consistency in terms of the prevalence rates it generated across surveys than the response-based case definition. Furthermore, evidence exists to support its validity and reliability in the context of large-scale surveys. The SHAW study (Smith, 2001; Smith et al., 2000) justified the use of a single-item case definition on the basis that reports of perceived work-related stress measured in this way were (i) positively correlated with reports of exposures to psychosocial hazards typically associated with work-related stress, (ii) associated with higher levels of minor physical morbidity and mental health problems and that, (iii) a repeat administration of the survey twelve months

after the first found higher levels of sickness absence and accidents in the high stress group, (iv) the high stress group was significantly different from control participants on validated questionnaires, and (v) all differences could not be attributed to negative affectivity, i.e., a generalised tendency to view the world and oneself in a negative way (Burke, Brief & George, 1993). This highlights the need for further research to investigate practical and theoretical issues surrounding the use of single-item case definitions which may offer a valid and reliable alternative to more detailed measures (Smith et al., 2000; Elo et al., 2003).

2.6.3 Transactional stress theory and case definitions

All of the case definitions used in the surveys considered here were informed by either response-based or stimulus-based theoretical conceptualisations of work-related stress. The contemporary transactional psychological perspective, described in detail in section 2.2.4, did not inform the design of any of the case definitions.

This omission may be considered surprising in view of the scientific consensus that the transactional perspective offers the greatest depth of knowledge and understanding of work-related stress (Cox, Griffiths & Rial González, 2000). It appears that surveys of the type considered here have failed to keep pace with contemporary theoretical developments on work-related stress; this has resulted in the use of theoretically outdated case definitions. The failure of surveys to include transactional case definitions may lie in the challenge that the complex perspective presents to measurement through its incorporation of a range of antecedent variables, moderating processes, immediate and long term

outcomes. This brings to the fore the greatest challenge in transactional theory: its application, and highlights the need for further research on the development of transactional case definitions that are compatible with the practical imperative for brevity in large-scale surveys.

Within both the interactional and transactional psychological perspectives on work-related stress an important role is ascribed to psychosocial hazard exposures. Indeed, the case definitions used in published studies in the scientific literature often rely solely on reports of psychosocial hazard exposures (Torkelson & Muhonen, 2002; Jex et al., 1992). As such, it is surprising that none of the surveys in this review incorporated psychosocial hazard exposure data into their case definitions for work-related stress (although several did collect such data but failed to integrate it into case definition design). The dominance of the exposure-based approach to case identification in the academic literature does not appear to have extended to the domain of large-scale surveys. This may be attributable, in part, to the fact that several national governments separately collect cyclical data on working conditions (a contemporary list of national surveys on working conditions conducted by European Union Member States is maintained on the website of the European Agency for Safety and Health at Work).

2.6.4 Limitations of the study

The review presented here has some limitations. Its purpose was to examine case definitions for work-related stress used in large-scale nationally representative workforce surveys in Britain. Surveys that did not incorporate British samples were excluded. Thus, the results and conclusions that can be

drawn are restricted to the British context. Restricted though they are, the results flag up the need for cross-border examinations of case definitions used in large-scale workforce surveys with a view to ensuring European and international consistency in the estimation of prevalence rates.

It is possible that some of the variance in prevalence rates generated by the surveys may be attributable to differences in survey design and administration. For example, some surveys permitted proxy responses (whereby a family member responded on behalf of the intended respondent) whereas others did not. Furthermore, some of the surveys were conducted verbally over the phone whereas others were paper-based. The current review was limited in its ability to assess the impact of such differences in design and administration on the prevalence rates achieved. Thus, it is possible only to conclude that differences in case definition design, along with differences in survey design and administration, together contribute to the prevalence rates generated by surveys of this type.

2.7 Conclusions

The systematic review presented here has facilitated a consideration of the implications of case definition design for the prevalence rates generated by large-scale nationally representative workforce surveys in Britain. Furthermore, it has provided a basis upon which to consider whether developments are required in the design of case definitions for work-related stress that may be used in future surveys of this type in order to enhance the validity and reliability of findings across surveys.

It has been shown that the failure of large-scale nationally representative workforce surveys to incorporate standardised and theoretically-based case definitions of work-related stress is a shortcoming that has implications for the reliability and validity of the prevalence rates generated. In terms of policy, the inconsistent estimates that these surveys provide make it difficult to assess progress towards national improvement targets for work-related stress and may hinder the efforts of government agencies to galvanise stakeholder action on tackling the issue. As such, the findings of this review point to the need for the development of new standardised and theoretically-based case definitions for use in future surveys. Equipped with such, it is possible that greater consistency might be found in the prevalence rates generated by future surveys: a development that would be of benefit for research, policy and practice on work-related stress. The development of such a case definition is described in the next chapter.

3. DEVELOPMENT OF A WORK-RELATED STRESS CASE DEFINITION FOR LARGE-SCALE SURVEYS

The study presented in chapter 2 revealed that a variety of case definitions for work-related stress have been used in large-scale nationally representative workforce surveys in Britain. The design of the case definitions has been informed by contrasting theoretical perspectives. This has contributed to the generation of inconsistent prevalence rates which, in turn, makes it difficult to measure progress towards national occupational health improvement targets and hinders policy and practice on tackling work-related stress. The findings highlight the imperative for the development of a case definition for work-related stress that is underpinned by contemporary stress theory and considered acceptable across stakeholder groups for use in future large-scale surveys in Britain. In response to that imperative, this chapter describes a study that concerns the development of such a case definition through a series of interviews (n=35) and focus groups (n=2) with subject-matter experts who represented eight key stakeholder groups that hold a vested interest in policy and research developments as they relate to work-related stress. These included employers' representative bodies, trade unions, occupational health practitioners, occupational health psychologists, clinical and counselling psychologists, insurers, legal professionals and workplace health and safety regulatory and enforcement bodies. Through the use of a template analysis approach, a set of themes relating to elements of a case definition was identified. These included, (i) a declared experience of work-related stress, (ii) evidence of unreasonable exposure to psychosocial hazards associated with

work, (iii) evidence of psychological ill-health (anxiety and depression) of equivalence to clinical morbidity, (iv) changes in work behaviour (absence) or presentation to a health professional for stress-related symptoms, and (v) the absence of negative affectivity. The emergent case definition is discussed in the context of its translation into an assessment tool for application within large-scale nationally representative workforce surveys.

3.1 Introduction

The systematic literature review reported in chapter 2 revealed that across the large-scale nationally representative workforce surveys on work-related stress in Britain published in the period 1997-2007, there was considerable variance in the prevalence rate generated. Prevalence was found to range from 0.4% to 27%. The surveys included in the review used a variety of case definitions, the design of which was informed by contrasting theoretical models. The surveys clustered into three categories in terms of prevalence rates and category membership appeared to be contingent upon the type of case definition used. It was concluded that inconsistencies in the design of the case definitions, in tandem with methodological differences in survey design and administration, are likely to account for the variance in prevalence estimates.

The situation described above is problematic from both a policy and research perspective. As described in section 1.3.1, in Britain there exists a policy imperative for reliable and valid estimates of the prevalence of work-related stress. This is driven by national targets for improvements in occupational

health (Department of the Environment, Transport and the Regions, 2000) that include a reduction the annual incidence of work-related stress by 20% and the number of working days lost to work-related stress by 30% by 2010 (Health and Safety Executive, 2003). The government uses the findings of large-scale nationally representative surveys to assess progress towards these targets. Inconsistent and unreliable prevalence estimates generated by these, along with other shortcomings in the evidence base, make it challenging to assess trends over time (Stansfeld et al., 2004) and difficult to judge whether the targets are likely to be met (Health and Safety Executive, 2001b; 2003a; 2005a).

From a research standpoint the situation is likewise unsatisfactory. It is perhaps obvious and inevitable that “the answer to the question ‘what is the scale of occupational stress?’ will clearly depend on how one defines stress” (Smith et al., 2000, p. 212). This statement highlights the need for consistency of approach to the design of case definitions used in large-scale surveys; such might valuably enhance the validity and reliability of research findings. As a result, calls have emanated from the research community for research on the development of standardised case definitions that could foster a situation whereby stress becomes “...clearly defined so that respondents are self-assessing against a common term” (Smith, 2001, p. 81).

Together, these policy and research imperatives point to the need for the development of new case definitions for work-related stress for use in large-scale nationally representative workforce surveys. Such case definitions should be underpinned by contemporary psychological stress theory and considered fit for purpose by key stakeholder groups if the prevalence rates that they generate

when used in surveys are to be accepted as accurate and useful by a broad range of vested interest parties.

3.1.1 The current investigation

In response to the imperatives described above, this chapter presents a study that addresses the second aim of the thesis: an investigation to identify the structure of a case definition for work-related stress for use in large-scale workforce surveys. The research was commissioned by the Health and Safety Executive with a view to the case definition developed in the study being used in future government-commissioned surveys of this type.

3.2 Method

3.2.1 Participants

A number of stakeholder groups can be identified that hold a vested interest in policy and research developments as they relate to work-related stress. They include employers' representative bodies, trade unions, occupational health practitioners, occupational health psychologists, clinical and counselling psychologists, insurers, legal professionals and workplace health and safety regulatory and enforcement bodies. Concern among these groups in respect of the reliability of the findings of large-scale nationally representative surveys on work-related stress might hinder attempts to galvanise stakeholder action on tackling this challenge to occupational health. Therefore, to maximise consensus among stakeholders on the suitability of a new case definition for use in such surveys, emphasis was placed in the design of this study on achieving stakeholder agreement on the construction of the case definition. As such, the

case definition's design was informed by the opinion of subject-matter experts drawn from the eight broadly defined stakeholder groups. The interest of each in respect of work-related stress is outlined later in this section.

Possible stakeholder groups and experts were identified using purposive sampling (Maxwell, 1996) that involved (i) discussions with the project commissioner, (ii) examination of the scientific and professional literatures on work-related stress, and (iii) web-based searches. The pool of possible experts was further expanded by asking each participant to suggest the names of additional experts on work-related stress from their field.

Subject-matter experts were approached and invited to participate. Two experts turned down the opportunity to participate in the study (an employers' representative group and an occupational health practitioner). Interviews were held with 35 individuals. These were augmented by two expert-group focus groups for insurers and occupational health professionals that respectively involved a further 7 and 12 experts. Thus, the study was largely exploratory, offering an indication of what can be achieved at a small scale in terms of consensus across stakeholder groups that might be replicated on a larger scale for validation purposes.

The fact that the research was exploratory in contrast to classic hypothesis-testing research is presented as a strength. As Herzog (1996) has argued, exploratory research is important; the task of exploring new ideas and perspectives and testing existing assumptions may represent a 'brave' path. The development of a structure to a case definition for work-related stress that is deemed acceptable across stakeholder groups for application within large-scale

nationally representative workforce surveys may well represent a 'brave' venture in the sense advanced by Herzog.

An overview of the interests and activities pertaining to work-related stress of each of the stakeholder groups represented in the study is given below.

Employers and their representative groups

In surveys, employers have consistently indicated that work-related stress is prevalent in their workforces and that it is perceived to have an adverse effect on organisational effectiveness. For example, 87% of employers (n=1,600) interviewed for one survey considered stress to be a possible cause of work-related illness (Pilkington, Mulholland, Cowie, Graham & Hutchison, 2001); similarly, 44% of respondents to a survey of senior human resource managers (n=593) identified stress as the factor likely to have the single greatest impact on workplace health (HSA, 2007). Underpinning employer concern about work-related stress is its association with employee absence (Confederation of British Industry, 1999), a link repeatedly identified in employer surveys. For example, one survey of 1,000 human resource practitioners found that 46% believed that stress-related absence had increased over the previous 12 month period in their organisations (Chartered Institute of Personnel and Development, 2006). Similarly, a survey of 625 organisations representing 127,585 employees found that short-term sickness absence attributable to 'stress, depression or other mental illness' rose in 2006 (Engineering Employers' Federation, 2007).

Employers are also motivated to address work-related stress by their legal obligations to take measures to protect the health and safety of workers. To

manage work-related stress within existing legal frameworks, employers need to assess psychosocial risk. This activity often involves the identification of cases and may yield benefits for both for employers and employees since it provides a shared language to deal with the issue of stress (Wiggins, 1995). Personal injury litigation for work-related stress has likewise provided further impetus for employers to address the issue. In particular, the first successful claim for work-related stress, *Walker v. Northumberland County Council* [1995], focussed employers' attention and gave rise to fears of 'a tidal wave of litigation' (Earnshaw & Morrison, 2001). The fear of litigation for work-related stress among employers appears strong and has been shown to stimulate organisational stress management activities (Cox, Karanika, Mellor, Lomas, Houdmont & Griffiths, 2007; Tasho, Jordan & Robertson, 2005).

Nevertheless, traditionally employers and their representative groups have appeared wary of work-related stress. This may be due, in part, to questions of how it can be measured and managed and whether non-work-related stress can be disentangled from that directly caused or made worse by work (Confederation of British Industry, 1999; European Foundation for the Improvement of Living and Working Conditions, 2001). Wariness may also have derived from a perception among employers of litigation for work-related stress having fuelled a compensation culture (Confederation of British Industry, 1999; Day, 2003) that uses employers as a scapegoat for people's general dissatisfactions. As the Institute of Directors has put it: "It is far easier to take an employer to court, 'the medicalisation of stress', than, say, family members" (Lea, 2003, p. 2).

Reddy (2002), and others, have argued that this wariness might be reduced by (i) the introduction of the Health and Safety Executive's standards of management behaviour against which an organisation can be measured and (ii) research endeavours that clearly define stress-related illnesses with attendant improvements in diagnostic practice. Indeed, as a consequence of the national roll out of the Management Standards for Work-Related Stress (Cousins, Mackay, Clarke, Kelly, Kelly & McCaig, 2004; Mackay et al., 2004) it is likely that the number of employers ignorant of their duties to control psychosocial risks will reduce year on year and that growing awareness will be accompanied by an appreciation that to ignore the issue may prove costly "in litigation, in out of court settlements, in sick pay and in having a de-motivated and under-productive workforce" (Earnshaw & Morrison, 2001, p. 485). There is some evidence to suggest that employers' awareness of their responsibilities in respect of work-related stress has increased following the launch of the Management Standards; however, many still hold that the term is difficult to define, is used too readily and that stress-related problems generally have their origins in the personality of the worker (Sainsbury, Irvine, Aston, Wilson, Williams & Sinclair, 2008). Some employers also remain wary due to problems associated with general practitioners diagnosing 'stress' on employee sick notes with very little information about what workplace accommodations might be made (ibid).

Trades unions

Trades unions have consistently taken a proactive approach to work-related stress, arguing that it presents a preventable health and safety concern (Larkin, 1997). The scale of the problem as perceived by trades unions in Britain is

discernable in the results of the biennial Trades Union Congress (TUC) survey of union safety representatives. In each of the first three surveys (1996, 1998, 2000), each of which involved approximately 3,000 respondents, stress was identified as a major concern, reaching a peak in 1998 with 77% of respondents identifying stress as a major problem in their workplace (Tudor, 2002). The figure dipped to 56% in the 2002 survey (*ibid*), remained at approximately the same level (58%) in the 2004 survey (Trades Union Congress, 2004) and rose slightly to 61% in the 2006 survey (Trades Union Congress, 2006a). The 2006 survey further revealed that six out of ten safety representatives identified work-related stress as the health and safety issue of greatest concern to workers. Further indication of the scale of the problem from the trades unions' perspective is evidenced in records of legal cases pursued by trades unions on behalf of members suffering from stress-related injuries attributable to work. In the three year period 1997-2000 the number of work-related stress cases taken on by trades unions rose from 459 to 6,428 (Oliver, 2002).

Much union activity on work-related stress has focused on litigation; unions are the primary source of financial support for personal injury actions where work-related stress is claimed. In 2003 the TUC revealed that it was aware of 2,503 new claims being pursued by unions in the previous twelve month period. As such, the case definition for work-related stress applied in personal injury actions is particularly salient and guides trades union activities on the promotion of health at work. In light of the number of personal injury cases pursued, British trades unions have consistently lobbied for specific work-related stress legislation that would oblige employers to protect employees from psychosocial risk (Tudor, 2002). Insofar as legislation would require a case definition by

which to make caseness assessments, trades unions may be considered to welcome research dedicated to the development of case definitions.

Trades unions have also vigorously supported the promotion of organisational interventions to tackle work-related stress. British trades unions have been among the most successful within the European Union in getting work-related stress included as an issue in collective bargaining with a view to applying a policy of prevention (European Foundation for the Improvement of Living and Working Conditions, 2001). Trades unions have also successfully contributed to the production of a landmark framework agreement on work-related stress signed by European social partners (that includes the European Trades Union Confederation). The agreement was designed to increase employer and employee awareness on the causes and management of work-related stress (European Trades Union Confederation, 2004). Interim findings showed that within two years of publication, considerable progress had been made on implementation of the framework across Europe (European Trades Union Confederation, 2006).

Occupational health practitioners

Occupational health practitioners are concerned with how work may affect health and the impact of ill health on ability to work (Pickvance, 2007). In response to the growth in reported stress-related problems in recent years, occupational health practitioners have increasingly taken an interest in work-related stress with a focus on its prevention and control (Arthur, 2006; Tehrani, MacIntyre, Maddock, Shaw & Illingworth, 2007; Wren, Schwartz, Allen, Boyd, Gething, Hill-Tout, Jennings, Morrison & Pullen, 2006). Consistent with this

growth, a survey of 1,600 health and safety practitioners for the Institution of Occupational Safety and Health identified work-related stress as a major occupational health issue and one on which practitioners would benefit from further training (Leka, Khan & Griffiths, 2007).

National Health Service (NHS) figures exemplify the extent to which work-related stress has become an issue of concern for occupational health practitioners; in the first quarter of 2006, 32% of individuals referred for counselling in one NHS Trust presented with work-related stress (Price, 2006). Similarly, one leading UK-based occupational health provider has estimated that per 100,000 workers, approximately 9,600 formal mental health referrals are received each year: the vast majority of these being stress-related in some way (private communication). Findings such as these have spurred many occupational health practitioners to introduce stress-reduction programmes to their organisations. Many have met with success. For example, the stress element of London Underground's Health Implementation Plan resulted in a fall in absence attributed to stress from an average of 20 days per employee per annum to 11 days at one-year follow-up (Carlton, 2007). British Telecom's Work Fit programme generated similar benefits; prior to its introduction around 500 employees were absent each day with a mental health problem; that number fell to 300 following roll-out of the programme to its 104,000 staff in 2002 (Suff, 2007).

Occupational health psychologists

The discipline of occupational health psychology was described in section 1.2.1. The study of work-related stress has traditionally comprised the backbone of

occupational health psychology research (Adkins, 1999) and continues to be core to the discipline (Houdmont, Leka & Bulger, 2008). Occupational health psychologists have been involved in the design, delivery and interpretation of some of the large-scale surveys on work-related stress discussed in chapter 2 as well as those that have assessed prevalence rates in specific occupational groups. Calls for developments in the case definitions for work-related stress used in surveys have been heard from researchers in the discipline (Kasl, 1978; Sauter et al., 2002; Schaufeli, 2004; Smith, 20001; Smith et al., 2000).

The research focus on work-related stress in occupational health psychology is reflected in professional practice in the discipline; one survey identified tackling work-related stress as a central component of the work of the practitioner (Arthur, 2002b). Survey respondents indicated that they might most usefully contribute to the reduction in stress-related problems through improving employer awareness of work-related stress, improving the design of jobs, educating society on the risks and providing training to managers. In this vein it has been suggested that occupational health psychologists may contribute to facilitating a wholesale change in perception from stress as an individual problem to one that is the joint responsibility of the worker and the employer (Wren et al., 2006). This issue is further considered in chapter 6.

Clinical and counselling psychologists

The ability to demonstrate the efficacy of psychotherapy and treatments for dealing with stress-related psychological problems is of importance within an evidence-based healthcare system. As such, various approaches have been subjected to scrutiny in recent years. This has spurred the introduction of

evaluation programmes, some of which have considered the work-relatedness of psychological problems (e.g., Clinical Outcomes in Routine Evaluation 'CORE' Outcome Measure: Evans, Mellor-Clark, Margison, Barkham, Audin, Connell & McGrath, 2000).

Arthur (2006) has discussed the challenges for clinical psychologists in addressing work-related stress, pointing out that where the occupational health psychologist might focus on matters of the design, management and organisation of work in the promotion of employee well-being, the clinical psychologist is typically more focussed on individual-level interventions. The two perspectives go hand in hand (Bond, 2004). General practitioners report an increase in presentations for symptoms of work-related stress, particularly arising from poor relationships at work, rising workload and pressure (Mowlam & Lewis, 2005) and it is often the clinical psychologist working in mental health services who will be required to deal with the more serious of the increasing number of presentations. As such, assessing the stress-relatedness of a problem and the work-relatedness of that problem are core to the clinical psychologist's activities.

Insurers

During the 1990s insurers became increasingly aware of the need for a proactive approach to dealing with work-related stress in response to the growing problem of absence from work and escalating cost of providing insurance cover (Eves, 1998; Tehrani et al., 2007). A survey of risk managers conducted in 1999 by Lloyds of London showed that stress-related employee claims posed the greatest

single perceived risk to insurers upon entry to the twenty first century (Goddard, 1999).

Indeed, the costs of work-related stress to insurers can be enormous in view of the fact that in most personal injury claims the insurer pays the (defendant) employer's legal fees. In 2003, personal injury claims for work-related stress claims ranked sixth in the Association of British Insurers' list of occupational injuries for which claims were brought that year (cf. Trades Union Congress, 2005). One survey of 1,400 human resource managers suggested that approximately one in twenty organisations had faced a legal claim in 2004 where work-related stress was alleged. The survey further suggested that the true number may be higher as many employer liability claims go directly to the insurer, bypassing human resources (ASB Law and Human Resources, 2005). Respondents to the same survey also observed that up to 50% of tribunal cases might have stress issues within them. Stress makes up almost one third of income protection claims (Norwich Union Healthcare, 2005) and in 1997-1998 claims for stress (not exclusively work-related) constituted 34% of all income protection claims made to Zurich Life and resulted in payouts of over £2.5 million (cf. Eves, 1998).

The main focus of insurance provision, once a claim reaches court, is on liability and compensation. Since the earliest psychiatric injury claims concerns have been raised about implications for the insurance industry including those regarding the scope for fraudulent claims and problems in establishing causation – all of which might open the litigation floodgates (Peart, 2003). Prompted by a governmental review of employer liability insurance, employers' representative groups have lobbied in recent times for a greater focus on work rehabilitation

within insurance arrangements rather than a focus on the pursuit of financial compensation. Many employer liability insurers now argue in favour of a 'rehabilitation first' approach to indemnity. This is not surprising given that a Government review revealed that employer liability claims for stress accounted for 1% of all employer liability claims in 2000, representing a huge proportional jump from 0.2% in 1997 (Department for Work and Pensions, 2003).

The change of emphasis towards proactive stress management has yielded benefits for the insurance industry. Investment in work-rehabilitation programmes has been shown to reduce sickness absence by more than 50%, the number of insurance claims by 30% and the costs to insurers by around 40% (Association of British Insurers, 2004). Some insurers now make reference to minor mental health problems in corporate medical insurance cover (psychiatric illnesses are usually covered adequately in separate income protection policies) and have introduced managed care specialists whose job it is to make assessments of workers who claim to have suffered from work-related stress with a view to the implementation of intervention packages. Others, such as PPP, have introduced employee assistance programmes paid for by employers and driven by the objective of containing income protection claims. To effectively manage the costs of sickness absence to the insurance industry the Association of British Insurers has called for an approved code of practice, the enforcement of which would be overseen by the Health and Safety Executive (Association of British Insurers, 2005).

Legal professionals

The preceding sections have shown that several stakeholder groups identify legal case definitions as being important to informing their activities on work-related stress. Key among these is the case definition applied in personal injury litigation where work-related stress is alleged. Research for the Health and Safety Executive has shown that the rise in personal injury litigation for work-related stress witnessed since the mid 1990s is among the major factors that have motivated organisations to act on tackling work-related stress (Cox et al., 2007; Tasho et al., 2005). The personal injury case definition, described in more detail in chapter 4, is hugely influential and has become the professional focus of a community of personal injury lawyers who specialise in the pursuit and defence of work-related stress claims. It is also the focus of much media reporting on work-related stress which, in turn, may encourage claims and contribute to the construction of the public understanding of and attitudes towards work-related stress. Media representations of personal injury claims for work-related stress are examined further in chapter 6.

A number of legal experts have observed and commented on the imperative for legal developments in case definitions for work-related stress, an imperative given added impetus by obligations under European legislation. These are discussed further in chapter 5.

Workplace health and safety regulatory and enforcement bodies

The research presented in this chapter was commissioned by the Health and Safety Executive, the enforcement body for the regulation of health and safety

in Britain. Since the early 1990s, the Health and Safety Executive has funded a wealth of research on work-related stress. Indeed, many of the surveys identified in the systematic review presented in the previous chapter were initiated by the Health and Safety Executive. A wealth of guidance for employers and employees on responsibilities as they relate to the management of work-related stress has also been commissioned and developed by the Health and Safety Executive. These publications have culminated in the Management Standards for Work-Related Stress programme of work (<http://www.hse.gov.uk/stress/standards>). The views of policy advisors, statisticians and scientific and medical advisors within the Health and Safety Executive and its associated agencies are thus of relevance to attempts to develop case definitions for work-related stress.

3.2.2 Data collection: Interviews and focus groups

The systematic review of the available literature on case definitions for work-related stress used in large-scale nationally representative workforce surveys (chapter 2), along with a series of meetings with the project commissioner, contributed to the production of a framework and key questions for semi-structured interviews (i.e., the a priori initial template described in the next section). The interviews sought to (i) establish participants' areas of expertise and stakeholder group affiliation, (ii) obtain descriptions of the case definition(s) used in participants' professional work and explanations of the context, manner and purpose to which these were applied, (iii) consider the possible content and structure of a case definition, and (iv) consider the theoretical and practical implications of its development. The interview schedule can be found in Appendix II.

Semi-structured interviews were used since they constitute a flexible and effective means of data collection in applied psychology research that allow for (i) questions to be repeated and their meaning clarified, thus ensuring respondents have correctly understood all questions, (ii) the interviewer to press for further information in response to incomplete or irrelevant answers, and (iii) the interviewer to observe non-verbal responses in interviewees which may yield further important information (Leka, 2003). The semi-structured interview is also advantageous for its capacity to reveal participants' differing perceptions of the topic of interest and to allow researchers to consider personal experiences (Mertens, 1998).

The same key questions were asked of each interviewee but individuals were free to discuss in more detail those issues that they considered particularly important. Thus, the interview protocol offered a starting point for responses without imposing a rigid structure. To ensure that no 'hypothesis' or point of view was imposed, key questions were kept to a minimum and care was taken to ensure that questions remained exploratory and non-directive (King, 1994; Kvale, 1996). Open-ended questions were used (e.g., *how is that put into practice?*) to encourage detailed answers.

Interviewees were initially contacted by email or telephone. The nature of the study was outlined as was the contribution that the individual might make to the research process. Most individuals approached were happy to contribute, many suggested that it was an important area that had vexed them for some time and required further investigation. Several indicated the scale of the challenge associated with the study's objectives and expressed doubt that it would be

possible to develop a case definition that would be acceptable across stakeholder groups for large-scale nationally representative workforce survey application. Many expressed intrigue as to the Health and Safety Executive's motives for commissioning and funding such research.

Interviews were conducted face to face in the interviewee's place of work (n=30) or, where this was not possible, by telephone (n=5). The quality of interview data elicited by these two methods is held to be comparable (Sturges & Hanrahan, 2004). The content of each interview was recorded by means of detailed notes taken by the interviewer using a pre-prepared response form. Note-taking has been shown to be an adequate alternative to audio-recording in occupational health research (Bradshaw, Barber, Davies, Curran & Fishwick, 2007). This is particularly so where the aim is to develop overall themes and consensus and where detailed micro-analysis of *how* something is said rather than *what* is said is not required (Randall, 2002). In the same way that telephone interviews can enhance interviewee's perceptions of anonymity and thus the level of interaction with the interviewer in occupational health research (Sturges & Hanrahan, 2004), note-taking as an alternative to audio-recording can be effective where there is reluctance on the part of an interviewee to consent to his or her precise words being audio-recorded (Bell, 2005). Indeed, in such a situation note-taking can encourage openness and honesty in responses (Robson, 2002). Prior to commencement of data collection, the researcher intended to make audio-recordings of the interviews. During the initial telephone conversation with each participant that was undertaken to identify a mutually convenient time for the interview to take place, the researcher posed the question of whether it would be acceptable to audio-record the interview. These conversations revealed reluctance on the part of several

prospective participants to submit to audio-recording. The researcher did not probe for an explanation for this although a number of participants volunteered that they wished to retain a degree of anonymity within the research process owing to anxiety about their words being quoted verbatim in an official (and publicly available) report for the Health and Safety Executive. To ensure consistency of approach, the decision was taken to record the content of all interviews through detailed notes on the pre-prepared response form. Given that note-taking as a means of recording interview content is most accurate when notes are produced as close to the interview as possible (Vonk, 2006), notes were taken during the interview itself. Frequent checks were made to ensure that the information had been accurately captured by means of the researcher both showing the interviewee what had been written in response to a question or at the end of a lengthy response and by verbally reflecting back what had been written prior to asking the participant to verify or correct the data (Bowling, 2002; Elliot, Fischer & Rennie, 1999). Each interview lasted between one and three hours.

Using the same semi-structured format, two focus groups were held with representatives from the insurance and occupational health practitioner constituencies. These were initiated in response to offers from two participants who had submitted to individual interviews. Both felt that the research was of particular importance to their affiliated stakeholder group and thus offered to convene national-level representative groups of experts from these specific domains. Focus groups have been advocated as a good method for exploring beliefs about health (Bowling, 2002) and in the current study offered insight into shared understandings and beliefs of participants, while still allowing individual differences of opinion to be expressed. Data were recorded using the same

approach used in the interviews. Focus groups were operated in accordance with published Health and Safety Executive guidance (*How to Organise and Run Focus Groups*, <http://www.hse.gov.uk/stress/standards/pdfs/focusgroups.pdf>).

3.2.3 Data analysis: Template analysis

Analysis of interview and focus group transcripts was carried out by template analysis, a qualitative technique for the thematic organisation and analysis of textual data as described by Crabtree & Miller (1999) and, specifically, as developed for application in the applied psychology context by King (2004). This involves the construction of a template that comprises codes which represent themes identified in interview narratives. Qualitative research has acquired popularity in the occupational health psychology and related literatures in recent years owing to its potential for “enhancing our understanding of key issues within I/O psychology, particularly given the increasingly complex substantive topics with which we are faced” (Cassell, Bishop, Symon, Johnson & Buehring 2006, p. 90). Nevertheless, there remains some mistrust and uncertainty regarding the quality of qualitative methodologies in the various sub-fields of applied psychology (ibid), despite their popularity in other social sciences (Spector, 2001). Among other things, this chapter offers a small contribution towards demonstrating the efficacy of qualitative methods in occupational health psychology research.

Template analysis has been shown to be effective in a host of studies that have involved the analysis of textual interview data to extrapolate and organise themes (Cassell, Bishop, Symon, Johnson & Buehring, 2006; King, Carroll, Newton & Dornan, 2002; Randall, 2002) including those where the objective has

been to compare the perspectives of different groups of individuals (King, 2004) and stakeholder group representatives (Cassell, Buehring, Symon, Johnson & Bishop, 2005). The technique has also found favour in the study of work-related stress (Randall, Cox & Griffiths, 2007).

Template analysis was considered preferable to other qualitative techniques such as content analysis or a grounded theory approach. As in content analysis, template analysis allowed for the pre-determination of particular themes in the data. In this context, themes are understood to constitute features of participants' accounts characterising particular perceptions and/or experiences that are deemed relevant to the research question by the researcher (King, 2004). These were formed on the basis of the extant scientific and professional literature plus the authors' and project commissioner's knowledge of the contemporary debates surrounding case definitions for work-related stress. Importantly, however, template analysis did not require these themes to be fixed at the outset but rather permitted them to act as a foundation upon which further themes could be revised during analysis. In this way the technique reflects something of grounded theory's absence of predetermined themes. Fielding (1993) has suggested that where research emanates from theory it is appropriate to pre-determine themes and, conversely, where the aim is to describe data with a view to the generation of theory the opposite holds true and codes may be developed out of the data. The mixed approach permitted by template analysis was considered appropriate for the current study where the intention was to take the extant literature as a starting point for the design of the semi-structured interview format that would stimulate relatively unconstrained interview responses. Thus, the technique allowed for the development of themes and areas of commonality across participant narratives

which in turn permitted the identification of the structure and content of a case definition.

Data analysis was conducted manually. Although qualitative data analysis software packages such as NVivo are capable of facilitating thematic template analysis by helping to organise data, such software can only assist the organisation of data and not its interpretation (King, 2004). Furthermore, data analysis software may be most useful for the analysis of extremely large data sets; a situation that did not apply to the current study. Each interview transcript was deconstructed into meaningful segments of text (defined as a piece of text that conveyed clear meaning about some aspect of case definitions for work-related stress) and compared to the initial set of predetermined themes (the initial template) (King, 1998). This allowed for the development of a deep understanding of the content of the interviews. The coding of each segment of text, i.e., the process of identifying themes in participant narratives and attaching labels or codes to index them, was carried out over two passes of the data (Miles & Huberman, 1994; Yin, 1994); the first allowed for the possibility that the data could be adequately accommodated by the initial template, whereas the second required some modification of the initial template to allow accommodation.

Initial template

With template analysis it is normal to define a priori a number of themes that reflect areas that are particularly salient to the aims of the research project (King, 2004). In the current study, the review of the available literature on case definitions for work-related stress used in large-scale nationally representative

workforce surveys presented in chapter 2, plus a series of meetings with the project commissioner, provided a framework and key questions for semi-structured interviews that was reflected in the initial template.

Template analysis has been referred to as an 'exploratory cataloguing exercise' (Randall, 2002). The initial template used here contained a number of categories relevant to the research question which could be modified and developed in light of the data. Within template analysis, the initial top-level template need not be entirely comprehensive – it merely provides a starting point on which analysis may proceed and a final template developed that is sufficient to accommodate all the data. Thus, the basic theme areas in the initial template were deliberately broad to allow for their development, and for them to be added to, through the analysis of the interview and focus group data. Following King (2004), excessive complexity was avoided and no attempt was made to arrange the codes hierarchically within the initial template (themes were, however, coded hierarchically in some portions of subsequent iterations of the template, see Figures 3-8). Rather, the focus here was on ensuring that the initial template was capable of assimilating the broad themes it was anticipated would emerge from the data while remaining receptive to having further codes added should data analysis reveal that to be necessary. Features in participant narratives were defined as themes where they were present in the narratives of no less than two subject-matter experts.

Six 'level-1' codes were included in the initial template: stakeholder group and role, case definitions employed in professional practice, professional applications of case definitions, benefits in defining caseness, the nature of stress, elements that might be included in a case definition for work-related stress for large-scale

survey application and implications of the development of a case definition. The initial template is shown in Figure 1.

Level 1	Level 2
1. Stakeholder group and role	1. Employers' representative
	2. Trades union
	3. Occupational health practitioner
	4. Occupational health psychologist
	5. Clinical or counselling psychologist
	6. Insurer
	7. Legal professional
	8. Workplace regulator
2. Case definitions used in professional practice	1. Survey-based
	2. Legal
	3. Bespoke occupational health assessments
	4. Psychological theory-based
	5. Clinical/counselling assessments
3. Professional applications of case definitions	1. Trend identification
	2. Policy formation
	3. Absence management
	4. Wellness management
4. The nature of stress	1. Discreet illness
	2. Process
	3. Exposure-based versus outcome-based assessment

5. Case definition elements	1. Single item
	2. Health status
	3. Psychosocial hazard exposure
	4. Confounding variables
6. Implications of defining caseness for work-related stress	1. Encouragement of a compensation culture
	2. Trend identification
	3. Facilitation of policy development
	4. Challenge in obtaining stakeholder agreement

Figure 1: Initial coding template

3.2.4 Validation

Following template analysis of narratives, a validation exercise was conducted to provide verification that the views of participants expressed in interviews and focus groups had been accurately reflected in the analysis. Following the recommendation of Miles and Huberman (1999) and King (1999), this was achieved through (i) a discussion about the results with fellow researchers in the area and (ii) presentation of the final list of themes (the final complete template) to a sub-sample of participants drawn from across the represented stakeholder groups, accompanied by a discussion between each of these participants and the researcher in regard to its content. The validation exercise confirmed that interview and focus group narratives had been accurately reflected in the analysis.

The same procedure was followed for each stakeholder group with the exception of the insurance profession. The Association of British Insurers requested a written statement on the analysis and results of the study with a particular emphasis on the contribution of insurers. This was duly provided and forwarded to a consultant who had been present as an observer at the focus group that involved representatives of seven leading insurers in Britain. The consultant was tasked by the Association of British Insurers with a consideration of the analysis, results and implications for the insurance industry. He subsequently signed off the report and in doing so confirmed that the analysis represented an accurate depiction of the contribution of insurers to the study.

3.3 Results

The six a priori higher-order (Level 1) codes, or broad themes, that had a direct bearing on the research question are indicated below. A seventh Level 1 code concerning the benefits to be yielded in defining caseness for work-related stress was added as data analysis progressed. Lower-order (Level 2 and Level 3) codes developed within each of the higher levels are also described.

The six broad themes represented in the a priori initial template (Figure 1), plus the seventh broad theme that was added as data analysis progressed, are considered here individually. Themes and sub-themes in Figures 3-8 are presented hierarchically to illustrate the relative importance of each in terms of the frequency of its appearance in participant narratives. Those themes presented towards the top of each template portion emerged with the greatest frequency across the narratives while those presented towards the bottom were

expressed less frequently. Features in participant narratives were defined as themes where they were present in the narratives of no less than two subject-matter experts. In this way, hierarchical coding allowed the interview data to be analysed at varying levels of specificity; higher-order codes (Level 1 codes) provided a good overview of the general direction of the interviews and highlighted areas of broad agreement, whereas detailed lower-order codes (Level 2 and Level 3) permitted fine distinctions to be made between and within interviews. Text was thematically coded into these categories direct from the detailed interview and focus group notes.

3.3.1 Stakeholder group and role

Level 1 and 2 a priori codes were established to identify the stakeholder groups represented in the study and the roles of subject-matter experts within those groups. Lower-level codes were developed for the particular job titles/roles held by participants (Figure 2). Themes are not listed hierarchically given that this portion of the template reports on participant demographics rather than subject-matter expert opinion on issues of caseness as it relates to work-related stress. Eight broadly defined stakeholder groups were represented in the interviews and focus groups: employers' representative groups, trades unions, occupational health practitioners, occupational health psychologists, clinical and counselling psychologists, insurers, legal professionals and relevant regulatory bodies. The professional roles of subject-matter experts included those of policy officer (employers' representative groups); legal, benevolence and health and safety officer (trades unions); medical officer and occupational physician (occupational health practitioners); academic and professional researcher and chartered psychologist (occupational health psychologists); consultant clinical and

counselling psychologist (clinical and counselling psychologists); employer liability and life insurer, independent liability consultant (insurers); barrister and academic lawyer (legal professionals); epidemiologist, policy officer, health and safety inspector and occupational psychologist (regulatory bodies).

Level 1	Level 2	Level 3
1.Stakeholder group and role	1. Employers' representative	1. Policy officer
	2. Trades union	1. Legal officer
		2. Benevolence officer
		3. Health and safety officer
	3. Occupational health practitioner	1. Medical officer
		2. Occupational physician
	4. Occupational health psychologist	1. Chartered occupational psychologist
		2. Academic researcher
	5. Clinical or counselling psychologist	1. Consultant clinical psychologist
		2. Counsellor

	6. Insurer	1. Employer liability insurer
		2. Life insurer
		3. Risk consultant
	7. Legal professional	1. Academic lawyer
		2. Barrister
	8. Workplace regulator	1. Policy officer
		2. Epidemiologist
		3. Health and safety inspector
		4. Occupational psychologist

Figure 2: Final template: Stakeholder group and role portion of template

3.3.2 Case definitions used in professional practice

Level 1 and 2 a priori codes were used to assess which of a range of possible case definitions for work-related stress subject-matter experts used in their professional work. Further level 3 codes were added as the analysis progressed (Figure 3). Themes are presented hierarchically in descending order to reflect the frequency of their expression in participant narratives.

Participant narratives made frequent reference to legal case definitions for work-related stress and particularly that used in personal injury litigation. This case definition was identified as being of central importance to guiding stakeholder activities on work-related stress. It was also noted to be confusing, difficult to apply in practice and in need of reform. Calls were evident in the narratives for guidance on its structure and application.

Other legal case definitions such as that contained within the Disability Discrimination Act 1995 appeared to be less influential but the potential for these alternative forms taking on greater prominence in years to come was noted. In respect of the Disability Discrimination Act, one interviewee explained its growing importance existing in the fact that: *"...it creates an alternative channel for stress cases, avoiding the civil courts and there is no requirement to prove foreseeability of psychiatric harm."* Irrespective of the particular form of claim, legal case definitions were flagged as important guides to the activities of stakeholders.

A second important case definition identified was that applied in the Self-Reported Work-Related Illness (SWI) survey series. The detailed case definition employed in the 1995 survey was held up as particularly robust and influential in terms of providing an indication of the prevalence of work-related stress at the national level despite its methodological limitations.

A third important category of case definition related to occupational health provision by medics and healthcare practitioners. Most were bespoke, designed to fulfill specific organisational needs such as absence management.

Level 1	Level 2	Level 3
2. Case definitions used in professional practice	1. Legal	1. Personal injury
		2. DDA
		3. Industrial Injuries Scheme
	2. Survey-based	1. SWI
		2. SHAW
	3. Bespoke occupational health assessments	
	4. Psychological theory-based	1. Demand-Control (Karasek)
		2. Transactional
	5. Clinical/counselling assessments	

Figure 3: Final template: Case definitions employed in professional practice portion of template

One hypothetical case definition was discussed: that which might be employed within the Industrial Injuries Scheme should work-related stress be re-considered by the Industrial Injuries Advisory Council (IIAC) for prescription as an industrial injury. It was noted that the IIAC had previously decided not to prescribe work-related stress (Industrial Injuries Advisory Council, 2004). Some participants noted that the introduction of work-related stress to the scheme might be a possibility in the future and that if work-related stress were to be prescribed the likelihood would be that the case definition would guide much

stakeholder activity. This issue is discussed in more detail later in this section as well as in chapter 7.

3.3.3 Applications of case definitions in practice

Four level 2 a priori codes addressed the practical applications to which subject-matter experts put case definitions for work-related stress in their professional activities (Figure 4). Themes are presented hierarchically in descending order to reflect the frequency of their expression in participant narratives.

Level 1	Level 2
3. Professional applications of case definitions	1. Trend identification
	2. Policy formation
	3. Absence management
	4. Wellness management
	5. Assessment of the merits of legal claims
	6. Justice seeking (through legal channels)

Figure 4: Final template: Professional applications of case definitions portion of template

These included the identification of trends for work-related stress through surveys and the application of such information towards informing policy to tackle the problem (at the national and organisational level). Participants reported that within the occupational health domain case definitions were applied for purposes of absence management and wellness management. Two additional level-2 codes were added to the initial template. These related to the assessment of caseness in considering the merits of a potential legal claim and the seeking of justice through legal channels where work-related stress has been alleged.

3.3.4 Benefits in defining caseness

The initial template did not contain codes relating to the benefits that might be yielded in defining a case of work-related stress. Data analysis revealed the necessity for such a code which was added (at level-1) to the final template (Figure 5). Themes are presented hierarchically in descending order to reflect the frequency of their expression in participant narratives.

Level 1	Level 2
4. Benefits in defining cases of work-related stress	1. Reduction in costs associated with sickness absence
	2. Quick assessment of the merits of a legal claim

Figure 5: Final template: Benefits in defining cases of work-related stress portion of template

Two level-2 codes were identified. The first concerned the reduction in costs associated with sickness absence that might be yielded by early case identification which, in turn, may allow for rapid intervention. The second concerned the quick, efficient and low cost assessment of the merits of a potential legal claim for work-related stress.

3.3.5 The nature of work-related stress

These codes explored whether, in defining a case of work-related stress, the focus should be on establishing the phenomenon as a discreet illness or as a transactional process (Figure 6). Themes are presented hierarchically in descending order to reflect the frequency of their expression in participant narratives.

Consistent with the view of one participant that a case definition should *“Consider stress-related symptoms, ‘stress’ is only a starting point”*, participants were virtually unanimous in their assertion that a case definition for work-related stress should start from the premise that the phenomenon is not an outcome or an illness in itself, but a construct that mediates the dynamic transaction between an individual and the environment.

Some narratives addressed the question of whether stress ought to be conceptualised in terms of (i) (self-reported) psychosocial hazard exposures, (ii) outcomes, or (iii) both. Most of these participants indicated that both elements should form the focus of interrogation with the bias on the effects of stress rather than the antecedents. One academic occupational health psychologist refused to be drawn on the nature of work-related stress, arguing that the term

is a misleading one that may hinder attempts to understand the nature of the relationship between an individual and the work environment.

Level 1	Level 2
5. The nature of work-related stress	1. Process
	2. Discreet illness
	3. Exposure- versus outcome-based assessment
	4. Stress as a misleading label
	5. Work-relatedness of stress

Figure 6: Final template: The nature of work-related stress portion of template

Some discussion centred on the degree of work-contribution that might be required to consider stress as being work-related. Some participants made the distinction between occupational stress and work-related stress, whereby the former refers to that stress which has its origins solely in work and the latter which refers to work as a contributory cause or exacerbating factor. It was acknowledged that occupational stress is likely to be a rare entity and it is therefore acceptable to talk of work-related stress. When discussing this issue, some participants adopted the use of legal terminology by suggesting that stress might be referred to as work-related where work has made a *material contribution*. Participants offered a range of suggestions on the degree of work-based material contribution that might be required for stress to be considered work-related. Suggestions ranged from 30% to 90%.

3.3.6 Case definition variables

Template analysis of participant narratives revealed that it was necessary to add a host of lower-order codes to the portion of the initial template that addressed the structure of a case definition and variables that might be included (Figure 7). Figure 7 presents themes hierarchically in descending order to reflect the frequency of their expression in participant narratives.

Multi-factorial perspective on caseness

In line with the perspective described above on the conceptualisation of work-related stress as a mediating construct, participants observed that a case definition ought to address relevant variables in the stress process rather than address the construct through a single diagnostic measure. Consistent with this, many commented to the effect that *“the questioning within a case definition for stress must be indirect”*. It was suggested that an approach to case assessment that involves the combination of information on a series of variables would filter out demand characteristics, disingenuous reporting and less severe cases. As one participant reported: *“If the standards of evidence suggested...are followed, then much of the frivolous, vexatious and culture/media led reporting of stress would be eliminated.”*

In contrast, a small number of participants observed that a single-item case definition of the ‘how stressful do you find your job?’ variety, might suffice given the need to maintain brevity within a survey-based questionnaire. Those advocating this approach pointed to the findings of the Bristol Stress and Health at Work study (Smith et al., 2000) as evidence of the adequacy of the approach.

Others, however, recommended that *“the word ‘stress’ should be avoided at all costs”* within a case assessment as a means of minimising the likelihood of demand characteristics occurring and the misinterpretation of symptoms. As one participant put it, *“the term stress is so misinterpreted maybe we should use an alternative term or avoid it altogether”*.

Declaration of work-related stress

Many participants suggested that the case definition should include a screening question to identify individuals who perceive that they are experiencing work-related stress at the time of assessment. An affirmative response to a screening question would be required to trigger the remainder of a case assessment. The precedent for this in existing case definitions used in government-commissioned surveys was noted. It was also observed that the requirement for an initial declaration of this type would enhance consistency between the case definition and that used in personal injury litigation for work-related stress.

Psychosocial hazard exposures

Virtually all participants highlighted the requirement for a case definition to include an assessment of unreasonable psychosocial hazard exposures, i.e., those aspects of work design, management and organisation that hold the potential to cause harm.

Many participant narratives presented a discussion on how such exposures might be captured within the context of large-scale surveys. Many focused particularly on the question of the adequacy of self-reported data. Some

participants identified the subjective nature of self-reports on psychosocial hazard exposures as problematic on the grounds that *“the meaning attached to a given stressor is highly individual”* and suggested that this might hinder the generation of estimates of ‘true’ exposure levels. Some legal professionals noted the inconsistency that the use of self-reports might create between the survey and personal injury litigation domains. In contrast, the majority noted that perceptions of psychosocial hazard exposures are by their nature particular to the individual and contingent upon a host of factors. Overall, it was held that self-reports provide a sufficient indication of perceived exposure within a survey context and that the nature of large-scale surveys precludes the use of alternative data collection methods. As one interviewee put it: *“if we can have alcohol breathalysers that don’t take account of individual differences, why can’t we have a rough measure of hazard exposure?”*

Two contrasting methods were suggested for the determination of the unreasonableness of exposure. First, it was posited that exposure might be considered unreasonable when it co-occurs with impaired health status. Second, it was suggested that exposure might be considered unreasonable when an employee has made a complaint to his employer about work-related stress and the employer has responded inadequately in terms of considering modifications that might reasonably be made to the psychosocial work environment. This latter perspective was noted to be consistent with the approach taken in personal injury litigation.

Discussion on the assessment of psychosocial hazard exposure prompted a number of participants to mention the Health and Safety Executive’s Management Standards for Work-Related Stress. Participants familiar with the

psychosocial hazard taxonomy encompassed within the Management Standards expressed the opinion that it offered a workable and useful, though imperfect, taxonomy. There was also appreciation that the Management Standards “*are here to stay*” and will likely guide future developments in work-related stress identification, measurement, enforcement and legislation and that, as such, it makes pragmatic sense to ensure all related activities in Britain are consistent with this framework.

Health status

All participants noted the requirement for health status to be considered within a case definition. A variety of opinions were expressed concerning aspects of ill health that might be addressed. For the purposes of creating a usable case definition for application in large-scale surveys, there was broad agreement that the focus ought to be restricted to psychological manifestations of stress and, specifically, anxiety and depression. When discussing this, one participant, a clinical psychologist, dissented, by suggesting that the whole premise of the study was “*f***** ridiculous*”! It was noted by some insurers and legal professionals that this restricted focus on symptoms of anxiety and depression would enhance consistency between survey and legal approaches to case assessments.

While accepting the restricted health assessment focus on symptoms of anxiety and depression as pragmatic for survey purposes, some participants noted that the restriction might reduce the scientific validity of the case definition to the extent that its use in contexts outside of the survey domain might be precluded.

This view was substantiated by reference to scientific studies on work-related stress that have considered a variety of “*verifiable physical health symptoms*” and health-risk behaviour outcomes which together offer an indication of “*more than just subjective feelings*”. In this vein, some expressed the view that “*stress lowers resistance to other illnesses*” and questioned “*how do we capture these?*” Virtually all participants held that the presentation of minor, sub-clinical, symptoms of anxiety and depression should terminate a case assessment. As one participant remarked: “*use of mild mental ill health as an outcome would add considerable uncertainty to the interpretation of any research findings...There is a duty to protect people from preventable ill health not to protect them from feelings of a lack of well being, fatigue or disappointment.*” It was suggested that a severity threshold of equivalence to psychiatric morbidity would ensure consistency with other major surveys of work-related stress. Furthermore, it was noted that “*it is relatively easy to diagnose depression and anxiety using DSM*”. The General Health Questionnaire (Goldberg, 1978) was recommended by many as an appropriate instrument for the measurement of anxiety and depression in the survey context.

Extensive debate centred on the validity and reliability of self-reports of psychological health status. It was acknowledged that the large-scale survey methodology generally precludes the collection of what might be termed ‘objective’ outcome data, such as performance appraisal records or reports from health professionals consulted by survey respondents. In light of this difficulty it was suggested by some that the validity and reliability of self-reported health status data (as well as that on psychosocial hazard exposures) might be

bolstered through triangulation, i.e., “the strategy of fixing a particular position...by examination from at least three different points of view” (Cox & Ferguson, 1994, p. 102). Sickness absence data was most commonly advocated in this respect. Most participants accepted the adequacy of self-reports of sickness absence data on the grounds that, as one participant put it, *“people can adequately report their own level of sickness absence”* with the exception of one dissenting voice which suggested that *“absence from work is largely affective. Directed absence from work, when directed by a general GP is also of little objective value.”* Self-reported visits to a general practitioner or occupational health specialist for ill-health perceived to be associated with work-related stress were suggested by some participants as an alternative source of triangulation data. Participants from the legal and insurance domains noted that triangulation of health status data with absence data and visits to a healthcare practitioner might add gravitas to survey-based case assessments as they are perceived within these professions.

A small number of participants suggested that the reliability and validity of self-reported health status information could be strengthened through the adoption of a longitudinal methodology that would allow for consistency of response to be monitored over time. However, it was also acknowledged that such an approach would be impractical in most large-scale surveys.

Confounding variables

All participants commented on the difficulty in separating out stress caused or contributed to by work from that which has its origins in or is exacerbated by

factors external to work. It was generally held that a case definition should attempt to *"recognise there are a range of vulnerability and triggering factors, both work and non-work related"* and that *"any good measure of caseness will attempt to consider the influence of external, non-work related factors."* Various individual differences and circumstances that might confound the relationship between psychosocial hazard exposure and psychological health were considered.

Negative affectivity was the variable most frequently identified by participants as having the potential to confound a case assessment. It was suggested that this generalised tendency to view the world and oneself in negative terms (Burke, Brief & George, 1993) should be considered due to its potentially confounding effect on data derived by self-report. As one interviewee suggested: *"as many as 20% of the adult population may be of the negative affectivity trait; easily enough to distort the results of an epidemiological survey."* Other variables each mentioned by a small number of participants included Type A behaviour, coping, control, domestic difficulties and social support received both internal and external to work.

It was noted that a consideration of confounding variables was consistent with the approach taken to the assessment of causation within the case definition used in personal injury litigation for work-related stress. Some legal professionals expressed the desire for additional factors to be considered as possible confounds. These included a previous history of mental ill health and exposure to traumatic events that might be associated with stress-related symptoms.

Level 1	Level 2	Level 3
6. Case definition elements	1. Single item versus multi-factorial perspective	
	2. Declaration of work-related stress	
	3. Health status	1. Psychological versus physiological symptoms
		2. Symptom severity
		3. objective indices
	4. Psychosocial hazard exposure	1. Assessment of <i>unreasonable</i> exposure
		2. Adequacy of self-reports
		3. Health and Safety Executive Management Standards hazard taxonomy
	5. Confounding variables	1. Negative affectivity
		2. Social support (at work)
		3. Social support (external to work)
		4. Type A behaviour
		5. Domestic problems

Figure 7: Final template: Variables for inclusion in a case definition for work-related stress portion of template

3.3.7 Implications of the development of a case definition

Figure 8 presents themes associated with the implications of the development of a case definition for work-related stress. Themes are presented hierarchically in descending order to reflect the frequency of their expression in participant narratives.

Key among the risks associated with the development of a case definition was the possibility that it might raise the public profile of work-related stress and thereby inadvertently encourage workers to pursue legal claims against employers. A so called 'compensation culture' was discussed at length by several participants who pointed to media reporting of legal claims, particularly personal injury claims, as responsible for encouraging workers to pursue financial awards through the courts. However, it was also noted that a survey-based case definition for work-related stress "*is unlikely to open the litigation floodgates because of the foreseeability question*", i.e., the requirement in personal injury litigation for a claimant to demonstrate that a specific illness was or should have been foreseeable to his employer.

Several participants commented on the challenge in achieving balance between the need for brevity in a survey-based case definition (owing to the fact that large-scale surveys that address work-related stress typically investigate the construct alongside several others) and the need for detailed and lengthy questioning within a case definition that is capable of generating a valid and reliable assessment. Some also noted that efforts to develop a case definition might be tantamount to "*locking the stable door once the horse has bolted*" in the sense that a focus on case assessments could potentially divert stakeholder

attention away from preventative activities. Further risks identified by a small number of participants concerned the encouragement of malingering in the workforce and the challenge in modifying the case definition to make it usable in a range of contexts without compromising its integrity.

In terms of opportunities, a number of participants advocated developments in survey-based approaches to the definition of caseness for work-related stress as a means by which to foster greater consistency between survey-based case definitions and those used in legal contexts. Consistency was identified as desirable on the grounds that it would simplify procedures to assess the merits of potential legal claims. Some also noted that consensus across stakeholder groups on the make-up of a case definition for work-related stress, albeit one designed for use in the survey domain, might encourage legal professionals (particularly judges), who might otherwise be wary of work-related stress, to acknowledge its reality and the potential it presents for serious harm to health.

It was further suggested that the case definition might encourage a reconsideration of policy on whether prescription for work-related stress could be possible in the context of the industrial injuries disablement benefit scheme. Work-related stress is not at present a prescribed industrial injury and it was felt by some that *“this definition should be imported into the IIS”*. There was some suggestion that the development of a survey-based case definition could contribute to a rethink on prescription by the Industrial Injuries Advisory Council due to the fact that *“it would offer a measure that could be applied by their lay administrators”*. However, some noted the difficulty in the identification of specific jobs that involve a risk for stress that is double to that evident in the ‘average’ job (as required under the rules of prescription) and indicated that the

'doubling of risk' problem could prove an insurmountable barrier to prescription.

As one participant noted, *"is there such thing as an inherently stressful job?"*

Level 1	Level 2
7. Risks and opportunities in defining caseness for work-related stress	1. Consistency with legal/compensatory case definitions
	2. Encouragement of a compensation culture
	3. Trend identification
	4. Facilitation of policy development
	5. Practical survey implementation challenges
	6. Challenge in obtaining stakeholder agreement
	7. Implications for the Industrial Injuries Scheme

Figure 8: Final template: Implications of defining caseness for work-related stress portion of template

3.4 Discussion

This section first considers whether it is possible to discern the structure and elements of a case definition from the themes identified in participant narratives. It then proceeds to address the limitations and implications of the study as well as avenues for future research.

3.4.1 Discernment of a case definition

Examination of the data using template analysis allowed for the identification of a series of themes that related to the structure and key elements of a case definition for work-related stress. These key themes were evident in the narratives of subject-matter experts across stakeholder groups. The first theme concerned the stance that a case definition ought to encompass a multi-factorial assessment framework rather than a single-item approach. Additional themes were identified for elements that might be contained within a case definition structure. These included: (i) a declaration of work-related stress, (ii) evidence of unreasonable psychosocial hazard exposures, (iii) evidence of psychological ill health (anxiety and depression) of equivalence to clinical morbidity, (iv) evidence of changes in work behaviour (absence) due to psychological ill-health or presentation to a healthcare professional for symptoms of psychological ill-health, and (v) evidence of negative affectivity. Such a framework is represented in Figure 9. Each theme is discussed below.

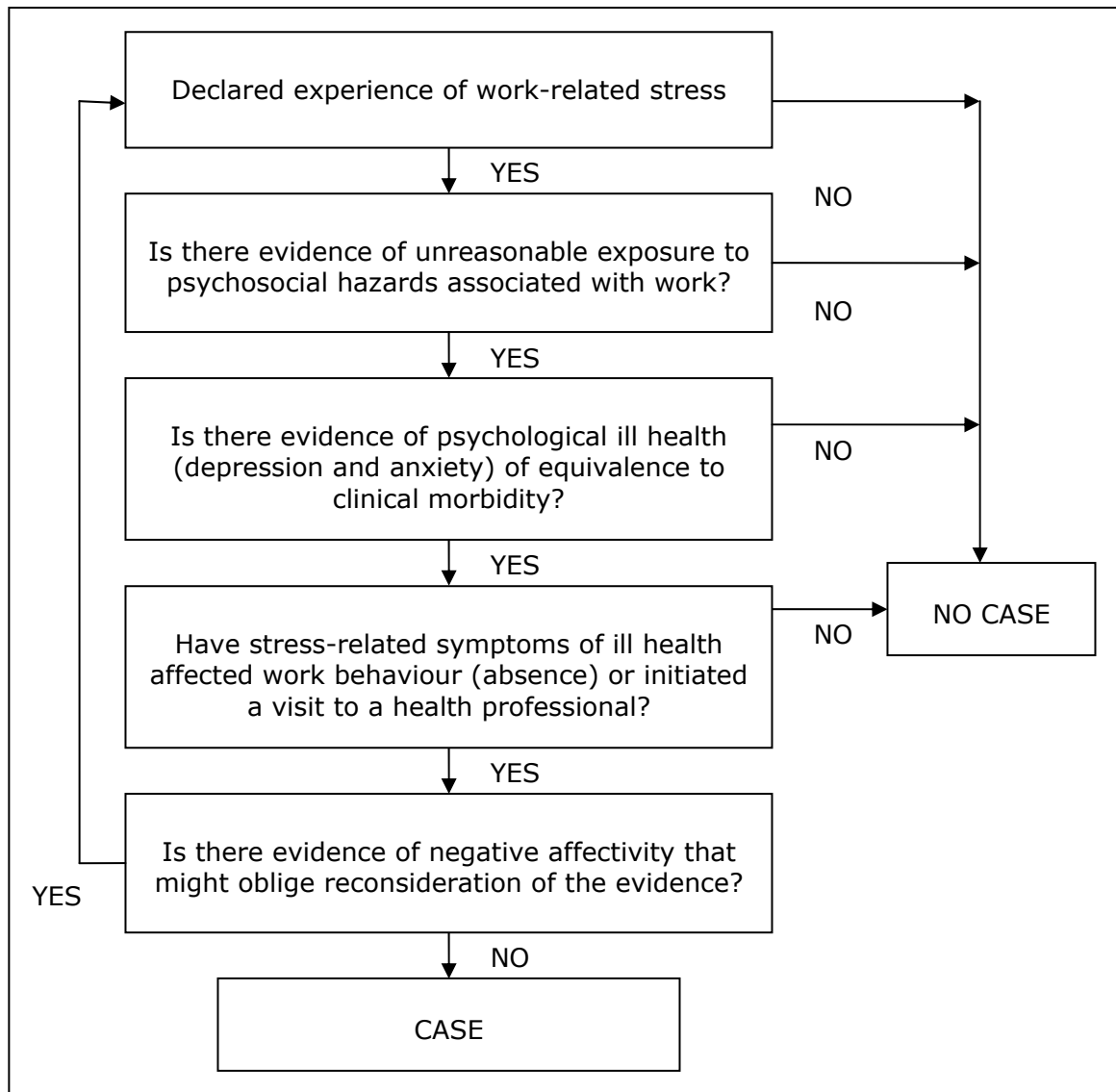


Figure 9: Framework to a case definition for work-related stress for large-scale workforce survey application

3.4.2 Multi-factorial perspective

Consistent with transactional stress theory (Cox, 1978; Cox & Mackay, 1981; Lazarus, 1991) which allows for a stress process consisting of antecedent factors, cognitive perceptual processes which give rise to the emotional experience of stress and correlates of that experience (Cox & Griffiths, 1995),

participants advocated a multi-factorial perspective over a single-item approach to case assessments. Although it is generally accepted that the transactional perspective offers the greatest depth of knowledge and understanding on work-related stress (Cox et al., 2000), no large-scale nationally representative workforce surveys in Britain have integrated the notion of a transactional stress process into their case definitions for work-related stress (see chapter 2). This may reflect the perceived complexity of measurement issues associated with transactional stress theory.

Despite the theoretical strength of a case definition that is multi-factorial and process-based, its translation into an assessment tool for large-scale survey application may present a host of challenges. Not least among these is the depth of questioning required and the implications of this for questionnaire length. Most large-scale surveys that have examined the scale of work-related stress have considered the construct alongside others within an overall examination of the relationship between work, health and safety. As such, survey instruments often run to many dozens of pages and take a considerable amount of time to administer. The imperative for brevity in case definition design explains some of the appeal of single-item case definitions that have increasingly found favour in recent years (Elo et al., 2003; Smith, 2001; Smith et al., 2000; Smith et al., 2004; Wadsworth et al., 2007). It might be anticipated that the integration of a multi-factorial case definition into already lengthy surveys may make such instruments unwieldy and could present a barrier to uptake of the case definition framework presented here.

3.4.3 Declaration of work-related stress

Many participant narratives contained the suggestion that a case definition designed for use in large-scale surveys should include a screening question to identify individuals who perceive that they are experiencing work-related stress at the time of assessment. An affirmative response to a screening question would be required to trigger the remainder of a case assessment. It was held that a screening question of this type would serve to expedite the survey administration procedure since a negative response would permit respondents to proceed to the next section of the questionnaire, bypassing the detailed assessment of work-related stress.

3.4.4 Unreasonable psychosocial hazard exposure

Consistent with the approach of much scholarly research on work-related stress, participant narratives revealed the centrality of reports of unreasonable psychosocial hazard exposures to a case definition. This is in contrast to the design of case definitions used in most large-scale nationally representative surveys in Britain in recent years⁴ (see chapter 2). As such, discussion is warranted here on how psychosocial hazard exposures might be assessed within large-scale surveys.

Two contrasting assessment methods were suggested by participants. First, exposure might be considered unreasonable where self-reported exposures and negative health status co-occur. Alternatively, exposure might be considered

⁴ Several of these surveys have collected data on psychosocial hazard exposures but have stopped short of integrating that data into a case definition for work-related stress.

unreasonable when an employee has made a complaint to his employer about work-related stress and the employer has responded inadequately in terms of considering modifications that might reasonably be made to the psychosocial work environment.

The first of these perspectives would allow for a conventional survey approach to the assessment of psychosocial hazard exposures that involves respondents indicating from a list of hazards those that they perceive themselves as having being exposed. The question of which might be the more appealing to survey designers might be determined by two factors, both of which point to the efficacy of the former. First, the weight afforded to tradition cannot be underestimated (*we've always used questionnaires so why change now?*). Second, the desire of stakeholders, as revealed in this study, for consistency between their activities on work-related stress and the Health and Safety Executive's Management Standards might support the use of questionnaires (within the Management Standards approach, psychosocial hazard exposures are measured using a 35-item self-report questionnaire, the Indicator Tool, which examines exposure to six categories of psychosocial hazard commonly associated with stress-related symptoms (Clarke, 2004)).

Integration of the latter perspective into large-scale surveys would constitute a novel and potentially complex undertaking. Nevertheless, it is one that could be preferred by survey designers should a premium be placed on consistency with the approach used in personal injury litigation. There was evidence in participant narratives that such consistency might be desirable. For this approach to be adopted it would be necessary to first produce an instrument, on which there was stakeholder consensus, to determine the adequacy of an employer's

response to an employee complaint about work-related stress. Such a task could be fraught with difficulty; indeed, the courts often struggle to arrive at a judgment on the reasonableness of an employer's actions in work-related stress claims.

Regardless of which approach might be preferred, both, by virtue of the nature of large-scale surveys, would necessarily rely on self-reports. For many work-related stress researchers, data elicitation by self-report presents no conceptual or methodological difficulty; much of the published research has been based on self-reported data (Matthews & Barnes-Farrell, 2006). Nevertheless, sole reliance on self-reported data would leave the case definition open to the charge, evident in a small number of participant narratives, that reports of psychosocial hazard exposures may be influenced by (i) transient mood, (ii) trait affect and (iii) attitudes, opinions and perceptions (Daniels, 2006) as well as (iv) response styles, (v) respondents' hypotheses about work-related stress, and (vi) additional personality characteristics (Semmer, Grebner & Elfering, 2004). Such concern appears to be at odds with the transactional perspective on stress which holds that the inherent emphasis on cognitive processes and emotional responses implies the need to use self-reports in an assessment strategy (Cox, 1993; Tse, Flin & Mearns, 2007). Furthermore, alternative techniques which may be used to obtain an impression of the 'objective' work environment, such as ratings by managers or external job-role 'experts', are replete with methodological problems (Daniels, 2006). As such, the self-report nature of a case definition designed for use in large-scale nationally representative workforce surveys can be seen as a design strength.

It is necessary to note here the ongoing debate concerning the validity of generic psychosocial hazard exposure measures. Where large-scale surveys have measured exposures they have usually done so using generic questionnaires that do not include tailored items that might enhance applicability with particular occupational groups. Such measures have been criticised for failing to capture the full range of hazards associated with all job types (Spector & Jex, 1998) and, indeed, the predictive validity of generic measures has been shown to be lower than that for profession-specific measures (McElfatrick, Carson, Annet et al., 2000; Tse, Flin & Mearns, 2007). In view of the possible limitations of generic exposure measures, the development of a host of sector-specific measures might be warranted that could be used interchangeably within a case assessment framework. However, in the development of sector-specific measures, care must be taken to ensure consistency across measures that would permit reliable cross-sector comparisons. Such sector-specific measures have begun to appear in the literature (e.g., Griffiths, Cox, Karanika, Khan & Tomas, 2006).

3.4.5 Health status

Consistent with many large-scale nationally representative workforce surveys on work-related stress conducted in Britain in recent years (see chapter 2), participant narratives revealed the centrality of evidence of health impairment to a case definition. Participants acknowledged that stress may affect virtually any aspect of psychological and physical health and contribute to the determination of health-risk behaviours. At the same time it was recognised that for large-scale survey purposes, theoretical, methodological and practical challenges in the assessment of a wide range of health problems point towards the need for a

pragmatic approach. The method advanced involved the restriction of symptoms of ill-health that might be considered within a case assessment to those of anxiety and depression that, in terms of severity, are of equivalence to clinical morbidity.

This approach follows precedent. The restricted focus on symptoms of anxiety and depression is consistent with much of the empirical literature on the nature of stress-related disorders (Arthur, 2002, 2005; Nieuwenhuijsen, Verbeek, de Boer, Blonk & van Dijk, 2006; Tennant, 2001) and large-scale longitudinal research on the relationship between work-related psychosocial hazard exposures and psychiatric morbidity (Clays, De Bacquer, Leynen et al., 2007; De Raeve, Vasse, Jansen et al., 2007; Kawamaki et al., 1992; Stansfeld et al., 1999). It is also consistent with the common focus in the scientific literature on affective disorders as indicators of work-related mental health (De Jonge & Schaufeli, 1998) and the conceptualisation of mental health problems in large-scale surveys such as the UK Quarterly Labour Force Survey (Almond & Healey, 2003). Furthermore, the restriction accords with official surveillance data gathered from occupational physicians and psychiatrists (<http://www.hse.gov.uk/statistics/tables/thorp01.htm>). It is also noteworthy that a high proportion of individuals who have received a formal diagnosis of anxiety or depression often refer to their problems by the term 'stress' (Sainsbury et al., 2008).

In terms of symptom severity it was held that the clinical-equivalence symptom threshold would ensure only the more serious cases would be captured within a case assessment. This approach is consistent with that adopted in previous large-scale surveys on work-related stress such as the Bristol Stress and Health

at Work study which found that respondents who reported their work to be 'extremely' or 'very' stressful typically demonstrated symptoms of anxiety and depression to a degree sufficient to warrant clinical diagnosis (Smith, 2001; Smith et al., 2000). The emergence here of agreement on a threshold is important in view of the lack of consistency in the scientific literature on the determination of the point at which harm might be considered to have occurred (Rick et al., 2002). Although pragmatic and founded on precedent, the 'clinical equivalence' approach raises some issues that were identified in the narratives. For example, a case definition that adopts this approach would probably fail to identify cases in individuals who presented with sub-clinical psychological problems or physical manifestations of ill-health, irrespective of the degree of associated distress and impairment to functioning. Furthermore, the approach would preclude the identification of problems in their early stages of development that would allow for early intervention.

3.4.6 Triangulation: Sickness absence and presentations to health professionals

The work-related stress literature contains a vast number of studies that have examined relationships between psychosocial hazard exposures and health outcomes. However, Daniels (2006) has noted that since the early days of research in this area there have been unheeded calls for studies to consider data triangulation as a means of establishing the validity and reliability of findings (e.g., Cook & Campbell, 1979). Participants in the current study appeared to be cognizant of the advisability of triangulation within a case assessment procedure. This was in line with the advice of Cox (1993) that triangulation may best be achieved through a consideration of data pertaining to perceived

antecedents of the stress process (psychosocial hazard exposures), self-reports of the experience of stress as negative emotion and changes in behaviour (including absence).

Two approaches emerged as themes in the data: (i) the integration of self-reported absence data relating to work-related stress as a means of examining changes in work performance and (ii) presentations to a healthcare professional for work-related stress or stress-related symptoms.

Participants' advocacy of sickness absence data is consistent with the approach taken in many scientific studies of work-related stress that have considered absence to be a useful observable indicator of changes in work performance (Bond, Flaxman & Loivette, 2006). The findings of longitudinal studies, in particular, lend strength to the argument for inclusion of absence as a correlate of the experience of work-related stress (e.g., Head, Kivimaki, Martikainen et al., 2006; Niedhammer, Bugel, Goldberg et al., 1998; Melchior, Niedhammer, Berkman et al., 2003; Nielsen, Rugulies, Christensen et al., 2004; Roelen, Koopmans, de Graaf et al., 2007; Stansfeld, Rael, Head et al., 1997; Vahtera, Kivimaki, Pentti et al., 2000). In addition, large-scale survey evidence demonstrates associations between stress, depression and anxiety and sickness absence (Health and Safety Executive, 2007), further lending weight to the argument for the inclusion of sickness absence as a variable within a case definition.

Participant opinion was divided on the reliability of self-reported absence data. Research findings suggest that, overall, self-reports may provide a reasonably accurate indication of absence rates. Studies have shown that the total number

of self-reported absence days is within two days of the recorded number of days for the majority of workers (Ferrie, Kivimaki, Head et al., 2005). Furthermore, it has been suggested that the high level of agreement between self-reported absence rates and employers' register data may support the use of self-reported absence data in epidemiological applications (Voss, Stark, Alfredsson et al., 2008). Whether the degree of agreement found by such studies might be considered adequate by stakeholders for the purpose of a large-scale survey-based case definition remains an empirical question.

The second approach to data triangulation evident as a theme in participant narratives involved presentation to a healthcare professional for work-related stress or associated symptoms. This might be considered appropriate in view of the fact that the general practitioner is often the first point of contact when illness arises (Faculty of Occupational Medicine, 2005) and that GPs report growing numbers of patient presentations with stress-related symptoms attributed to work (Mowlam & Lewis, 2005). It is also consistent with the case definition used in personal injury litigation for work-related stress. However, it is known that many people suffering from psychological disorders of psychiatric magnitude remain untreated through a failure to present to an appropriate health professional (Rabkin, 1993). That being the case it might be important that presentation to a health professional is not considered in isolation within a case definition as an observable correlate of work-related stress but, rather, as an indicator alongside sickness absence.

3.4.7 Negative affectivity

The scientific literature identifies a range of personality/dispositional, situational or social variables (Cooper, Dewe & O'Driscoll, 2001) that might play a role in

the stress process. In the current study, a common theme emerged out of the data concerning the importance of the inclusion of one such variable in a case definition for work-related stress: negative affectivity (NA), defined as a generalised tendency to view the world and oneself in negative terms (Burke, Brief & George, 1993; Clark & Watson, 1991).

In recent years, the spotlight of research on individual variables that might have a role in the stress process has increasingly fallen on NA (Barsky, Thoresen, Warren & Kaplan, 2004). Indeed, it has been suggested that NA has received more attention than any other personality variable in the study of work-related stress (Cooper, 2000). Five broad categories of model have been presented in the literature to account for the role of NA in the stress process (Barsky et al, 2004). These can be summarised in terms of (i) the *regression* model, which posits that psychosocial hazard exposures and NA have independent direct relationships with health outcomes, (ii) the *common cause* model, which suggests that NA underlies responses to both psychosocial hazard exposures and health outcomes, generating inflated correlations between the two when assessed by self-report means, (iii) the *full mediation* model, whereby NA is related to perceptions of psychosocial hazard exposures which, in turn, are related to health outcomes, (iv) the *partial mediation* model, in which NA has a direct and mediated effect on health outcomes through perceptions of psychosocial hazard exposures, and (v) the *exacerbation* model, whereby NA moderates the relationship between psychosocial hazard exposures and health outcomes.

Most of the scientific research on NA in the context of work-related stress has focused on its possible influence on self-reports of psychosocial hazard exposures and health outcomes (Cooper, 2000). As a result, an extensive

scholarly debate has developed on the question of whether account of NA ought to be taken within case assessments for work-related stress (e.g., Payne, 2000; Spector, Zapf, Chen & Frese, 2000). One argument is that NA ought to be included because “high NA would predispose respondents to self-report higher levels of work-related stressors and higher rates of job strain, i.e., negative affective states, and that associations between self-reported stressors and strains would, therefore, be inflated” (Wainright & Calnan, 2002, pp. 48): the common-method variance problem. Indeed, there is some evidence to suggest that NA may inflate relationships assessed by self-report (Brief, Burke, George, Robinson & Webster, 1988; Parkes, 1990). However, others have found little evidence of this (Chen & Spector, 1991; Jex & Spector, 1996; Semmer & Zapf, 1989; Semmer, Zapf & Greif, 1996; Spector et al., 2000; Spitzmüller, Holz, Ohly, Werner & Zapf, 2007; Zapf, 1989). Spector (2006) has suggested that the debate on the role of NA has itself become inflated to such an extent that the supposed distorting effects of the construct have been elevated to mythical status.

The inclusion of NA within a case assessment framework for work-related stress presents a challenge to measurement given the instability of the construct. It is possible to distinguish between *state* NA, which varies according to the status of a host of factors such as mood or may be a response to unreasonable psychosocial hazard exposures (Spector et al., 2000), and *trait* NA, which is presumed to be a stable reflection of personality. Such a distinction is recognised in widely used measures of NA (e.g., the Positive and Negative Affect Schedule (Watson, Clark & Tellegen, 1988)), and to neglect to account for either form in a case assessment framework would be to fail to assess a key component of the construct. The role of the construct within the stress process

and implications for its measurement are further complicated by the possibility that individuals high in NA might self-select into particular types of jobs, particularly those that are low in complexity (Spector, Fox & Van Katwyk, 1999; Spector, Jex & Chen, 1995).

In view of the inconclusive nature of the evidence and the extent of the debate on the role of NA within the stress process, increasingly work-related stress researchers have accounted for it in studies. The trend to measure the construct has extended into large-scale survey research (e.g., Smith, 2001; Smith et al., 2000). Ultimately, the absence of an unequivocal position on the biasing effects of negative affectivity might be productively dealt with through its inclusion within case assessments which would allow researchers to partial it out at the analysis stage should they so wish (Semmer, Grebner & Elfering, 2004). That advice is accepted here.

3.4.8 Limitations and further research

The generalisability of exploratory research

Taken together, the themes identified in narratives provided a comprehensive overview of participants' perspectives on case definitions for work-related stress in the context of large-scale nationally representative workforce surveys. It is important to note that the analysis did not claim to make sweeping claims about the area; it would not be appropriate to generalise qualitative research findings beyond the immediate research context (Burns, 2000; Leka, 2003). Rather, the goal was to investigate areas of interest with a restricted participant sample drawn from a single country with a view to stimulating discussion and to

influencing the design of case definitions used in large-scale nationally representative workforce surveys on work-related stress in the context of supporting developments in policy and research.

The study involved a sample of subject-matter experts working in Britain within country-specific domains of stakeholder activity. Participants were not randomly drawn from the stakeholder groups that they represented and the sample size was relatively small. Therefore it is important to view the findings as preliminary ones that may help to guide future research; the case definition presented is in no way intended to definitively represent the views of all stakeholder groups. Thus, the investigation should be considered as exploratory and could be replicated on a larger scale for validation purposes.

Further research is warranted on the development of case definitions for use in international surveys. These would permit improved cross-border prevalence comparisons that would be of value for both research and policy. It is hoped that the exploratory study described here will pave the way for studies that seek cross-border stakeholder agreement on a framework for a case definition and translation of that case definition into an assessment tool comprised of validated measures.

Implications of parameters on research design

Two stipulations of the project commissioner were particularly influential in guiding the research: (i) the importance placed on subject-matter expert agreement across stakeholder groups and (ii) the need to avoid the case definition framework becoming detailed to the extent that it would translate into

an assessment tool that would be unwieldy and unsuitable for survey application. These stipulations might have limited the scope for participants' 'blue sky' thinking and it is possible that a more complex case definition framework would have emerged in the absence of these stipulations. This might be particularly so in respect of the host of personality/dispositional, situational and social variables that could potentially be included in a case definition.

Translation of the case definition framework into an assessment strategy

It was beyond the scope of the current study to consider the precise means by which the case definition framework might be translated into a survey-based assessment strategy. No single instrument exists that encompasses self-report measures on all of the variables included in the case definition presented herein. Further research is required to consider the relative merits of existing instruments that are available for the measurement of each of the variables and to consider, where necessary, the development of new measures with a view to the creation of an overall assessment strategy that balances brevity in survey administration against reliability and validity.

The interplay between survey-based and legal case definitions

Participant narratives made frequent reference to legal case definitions for work-related stress and, particularly, that used in personal injury litigation. The personal injury case definition was identified as being important to guiding stakeholder activities on work-related stress. It was also noted to be confusing, difficult to apply in practice and in need of reform. Narratives revealed a desire for consistency, so far as it might be possible, between the survey-based case

definition and the personal injury case definition. Consistency was considered attractive on the basis that it might help foster agreement across stakeholder groups on the acceptability of statistics on the scale of work-related stress generated by large-scale surveys as well as facilitate the transparent assessment of the merits of potential legal claims. It was also conjectured that consistency and transparency might reduce the number of speculative claims pursued. The premium placed on consistency between these two case definitions was in line with the stipulation of the research commissioner of this study that the case definition developed ought to be consistent with other case definitions identified by participants as key to informing their activities on work-related stress. The primacy afforded to consistency between the personal injury and survey-based approaches to case assessments for work-related stress might determine, in part, the adoption and usefulness of new case definitions. In view of (i) the shortcomings of the personal injury case definition for work-related stress identified in participant narratives and (ii) the importance placed by participants and the project commissioner on consistency between it and the survey-based case definition developed in this chapter, further research is warranted to investigate the scope for development of the personal injury case definition for work-related stress. Such an investigation is presented in chapter 5.

Narratives also contained frequent reference to a compensatory case definition that does not, at present, exist: that which might be employed within the Industrial Injuries Scheme (IIS) should work-related stress be considered for prescription as an industrial injury. Some participants noted that integration of work-related stress into the scheme might be possible in the future and that if it were to be prescribed the likelihood would be that the IIS case definition would

guide much stakeholder activity on work-related stress. Further research is required to examine issues of caseness for work-related stress within the IIS: a theme examined further in chapter 7.

3.5 Conclusions

The study reported in this chapter revealed that it was possible to develop a case definition for work-related stress that might be used in future large-scale nationally representative workforce surveys. Agreement could be found among subject-matter experts drawn from a range of stakeholder groups on the structure of such a case definition and the variables that it might include. This finding has implications for national policy on work-related stress. Equipped with a case definition that is considered valid and suitable for large-scale survey application, the ability of Health and Safety Executive to measure progress towards national improvement targets for work-related stress would be enhanced. Based, as the case definition is, on the elicited opinion of subject-matter experts drawn from key stakeholder groups, it is likely that the prevalence rates generated by future surveys that use the case definition might be subject to less criticism and disagreement than has been targeted at previous survey findings; as such the case definition might serve to galvanise stakeholder action on tackling work-related stress.

The findings highlight the need for further development work that involves (i) larger samples as well as samples drawn from international constituencies, (ii) the translation of the case definition into a survey-based assessment strategy, and (iii) investigations into the compatibility of this case definition with that

used in personal injury litigation for work-related stress. Compatibility in this respect might have a bearing on the acceptance and adoption of the case definition developed here among stakeholders and an important influence on policy developments as they pertain to work-related stress. This issue is explored in the following two chapters.

Like all case definitions for work-related stress, that presented here does not provide a perfect and comprehensive account of the stress process that will apply to every worker in every work situation. Rather, it offers, as Briner and Reynolds (1999, p. 650) put it, "a means of representing possible relationships between variables, and a method of thinking about the concept of organizational stress". It does not seek to explain "exactly *why* or *how* stress (however defined) actually *causes* undesirable employee states and behaviors" (emphasis in original) (ibid, p. 651). Any attempt at the development of a case definition for work-related stress can be criticised from a number of theoretical and pragmatic standpoints. However, criticism should not prevent attempts to operationally define the construct as a means of bringing about developments in policy and research. In this vein it is worth recalling Semmer's (2003) observation that in research on work-related stress: "all too often we tend to dwell on differences and difficulties, and sometimes it seems worthwhile to see if there is some forest emerging behind all the different trees" (p. 84).

4. CONSISTENCY BETWEEN THE SURVEY-BASED AND THE PERSONAL INJURY CASE DEFINITIONS FOR WORK-RELATED STRESS

In commissioning the study described in chapter 3, the Health and Safety Executive stipulated that consistency of design was desirable, in so far as it might be possible, between (i) the case definition developed in that study for use in large-scale nationally representative workforce surveys and (ii) other case definitions identified as being important to informing stakeholder activities on tackling work-related stress. It was held that consistency would facilitate agreement among stakeholders on the validity of the new case definition as well as the reliability of the prevalence rate that it might generate when applied within future surveys. Together, these factors were identified as being important for galvanising support for activities targeted at the reduction of work-related stress. The value placed on consistency by the project commissioner was echoed in participant narratives. These identified the case definition used in personal injury litigation for work-related stress as being particularly salient in this regard. In view of the importance of this case definition in terms of (i) its role in guiding stakeholder activities and (ii) its status as the key case definition with which consistency might be sought, this chapter describes its emergence, structure and operation. This is followed by a study that examines consistency between the two case definitions. The study involves a comparison of the conceptual content and approach to measurement associated with each of the elements encompassed in the case definition developed in chapter 3 and the personal injury case definition as it applies to work-related stress. The latter

case definition is understood in the terms described in the most authoritative available account of the interpretation and operation of the personal injury case definition in work-related stress claims: the sixteen practical propositions set out by the Court of Appeal in the influential case of *Hatton v Sutherland* [2002]. Implications of dimensions of congruence and dissonance are considered and developments suggested that might enhance consistency.

4.1 Introduction

This chapter takes as its starting point the value placed by the Health and Safety Executive on consistency of design, in so far as it might be possible, between (i) the case definition developed in chapter 3 for use in large-scale nationally representative workforce surveys and (ii) other case definitions identified by subject-matter experts who participated in that study as being important to informing stakeholder activities on tackling work-related stress.

The project commissioner placed value on consistency of design between case definitions on the basis that it would serve to maximise acceptance among stakeholders on the validity of the new case definition developed in chapter 3 as well as the reliability of the prevalence rate that it might generate when applied within future surveys. Acceptance among stakeholders on these points was held to be important for galvanising support for activities targeted at the reduction of work-related stress.

The value placed by the Health and Safety Executive on consistency between the new case definition and others that play an important role in shaping stakeholder activities on work-related stress was reflected in participant narratives in the study described in chapter 3. These identified the case definition used in personal injury litigation for work-related stress as being particularly salient in this regard. The personal injury case definition was also noted to be confusing, difficult to apply in practice and in need of reform; issues examined further in the following chapter. Consistency between these two case definitions was held to be desirable by subject-matter experts who participated in the study on the basis that it might (i) help foster agreement across stakeholder groups on the acceptability of statistics on the scale of work-related stress generated by future large-scale surveys that use the new case definition, (ii) facilitate the transparent assessment of the merits of potential legal claims, and (iii) promote awareness among employees of the requirements of a successful case assessment and thereby reduce the number of speculative personal injury claims that are pursued.

In view of the importance of the case definition used in personal injury litigation for work-related stress in terms of (i) its role in guiding stakeholder activities on tackling stress and (ii) its status as the key case definition with which consistency might be sought, this chapter provides an account of its emergence, structure and operation. This is followed by a study that addresses the third aim of the thesis through a mapping exercise that examines consistency between the two case definitions. Implications of dimensions of congruence and dissonance are considered and suggestions advanced for developments that might enhance consistency.

4.2 The rise of personal injury litigation for work-related stress

The finding from the previous chapter concerning the importance of the case definition used in personal injury litigation for work-related stress in shaping stakeholder activities on tackling stress concurs with earlier research findings. Previous case study research for the Health and Safety Executive had shown the rise in personal injury litigation since the mid 1990s to be among the major factors that have motivated organisations to act on tackling work-related stress (Cox et al., 2007; Tasho et al., 2005). These findings also correlate with the growth in media reports on personal injury litigation for work-related stress (Stansfeld et al., 2004) (the media representation of personal injury litigation for work-related stress is examined in chapter 6). This section places the above findings in their real-world context by providing an overview of the rise of personal injury litigation for work-related stress.

Prior to the mid 1990s, personal injury claims for work-related stress were virtually unknown. The situation was to change following a series of psychiatric injury claims associated with accidents at work that arose out of well documented fatal incidents including the capsizing of the Herald of Free Enterprise passenger ferry and fires at Bradford football stadium, Kings Cross underground station and the Piper Alpha oil rig as well as the Hillsborough football stadium and Marchioness pleasure-boat disasters (Earnshaw & Cooper, 1994; Peart, 2003; Trimble, 1995). The media attention surrounding those incidents and the court cases that arose out of them (e.g., *Alcock v Chief Constable of South Yorkshire Police* [1992]; *Frost v Chief Constable of South Yorkshire Police*

[1997]) were instrumental in triggering a comprehensive review of the law for liability for negligently inflicted psychiatric illness (Law Commission, 1998).

One by-product of the upsurge in psychiatric injury claims arising out of accidents was a focusing of attention on developments in case law for psychiatric injury arising out of work-related stress. Thus, in 1993 the case of *Petch v The Commissioner of the Customs and Excise* [1993] was the first common law claim to establish that ordinary principles of tortious (negligent) employer liability apply in work-related stress claims and that an employer's duty of care extends to protection against psychiatric as well as physical injury. These principles constitute the personal injury case definition for work-related stress. They are described in detail in section 4.3.

Although *Petch* established that the common law duty of care extended to mental as well as physical health, its impact on public awareness of common law liability for work-related stress remained limited due to the claim's ultimate failure. At first instance the court had found in favour of the claimant. The Court of Appeal reversed that judgment on the grounds that the employer had a duty to take reasonable care to ensure that work did not cause a repeat episode of an illness; it was held that the psychiatric illness (hypomania) experienced in 1983 was not a repetition of a previous psychiatric episode in 1974 (severe depression) and as such it was not reasonable for the employer to have foreseen the second episode of psychiatric illness. Furthermore, it was held that the employer had taken reasonable action to avert further illness upon the claimant's return to work in 1975 by encouraging the claimant to take sick leave and seek medical help as well as transferring him from Customs and Excise to the Department of Health and Social Security.

A number of high profile claims followed *Petch*. Key among these was *Walker v Northumberland County Council* [1995]. *Walker* is generally regarded as the landmark work-related stress personal injury claim (Howard, 1995). The judgment asserted, once again, that the employer's duty of care extended to mental health, not only where impairment had arisen out of physical injury but also where psychiatric damage had occurred as a result of the volume and character of the work which the employee had been required to perform, i.e., the psychosocial work environment. The judgment in *Walker* has been described as remarkable less for what the judge did than for what he did not, i.e., give way "to the understandable temptation to adapt the duty of care for occupational psychiatric harm" (Sprince, 1998, p. 66). Sprince (ibid) went on to note that "for Colman J [the judge], it made no difference that the duty had traditionally been applied in cases of physical harm. His judgment proceeded on the basis that the duty has always embraced isolated psychiatric harm as well." Thus, the judgment established that the ordinary principles of tortious liability, and the case definition therein, applied in personal injury claims for work-related stress. Judgment in favour of the claimant came as a surprise to the regulatory and enforcement bodies. Asked to comment on the case after its closure, a Health and Safety Executive spokesperson observed that overwork and long hours were not considered a health and safety issue by the Health and Safety Executive (Hazards Magazine, 1994/5), a position it was to radically modify shortly thereafter.

Walker became a landmark case owing to its clear demonstration of the personal injury case definition in operation. In light of this fact it was expected that the case would trigger a flood of work-related stress claims (Howard, 1995) and, indeed, the judgment has been regarded as responsible for "having produced

the social and economic conditions to awaken the employer's existing, but hitherto dormant, duty of care to prevent psychiatric harm" (Sprince, 1998, p. 67). In view of the importance of the case, brief description of the details is merited here.

Mr Walker was an Area Social Services Officer employed by Northumberland County Council from 1972 to 1988. He was responsible for the management of four teams of social services field officers who dealt with a large number of childcare problems and child abuse investigations. In November 1986 he suffered a nervous breakdown and did not return to work until March 1987. In September 1987 he went on sick leave upon medical advice and subsequently suffered a second breakdown which led to dismissal on the grounds of permanent ill-health in February 1988. The judge held that the first breakdown in November 1986 was not foreseeable to the employer as there was no evidence available at the time which might have alerted the employer to the possibility that Mr Walker's workload would give rise to risk of mental illness. Thus, the employer was not found liable for that initial episode of illness. However, upon Mr Walker's return to work in March 1987 the employer had a duty to take reasonable steps to avoid a repetition of the illness. In this regard it failed. The employer's installation of a member of staff to assist Mr Walker for a limited period only (although promised for as long as necessary) upon his return to work was considered inadequate to prevent work pressures reverting to pre-illness levels. The judge held that it was 'quite likely, if not inevitable' that a repetition of the illness would occur following Mr Walker's exposure to work pressures similar to that which had caused the first breakdown. Furthermore, it was held that the employer should have recognised the employee's increased vulnerability to psychiatric damage as a result of the first breakdown. No award

of damages was made by the judge as the case was settled out of court for £175,000 in May 1996 ahead of the employer's appeal. *Walker* provided an authoritative and clear illustration of the application of the personal injury case definition for work-related stress and in doing so set a template that remained largely unchallenged until 2002.

The interpretation and application of the ordinary principles of employer liability (the case definition) in work-related stress claims as established in *Petch* and *Walker* received no legal challenge for several years thereafter. Likewise, little academic attention was paid to the topic. One exception was the concern expressed from within the psychiatric community about the implications of *Walker* for individuals with a history of psychiatric injury. It was suggested that the finding of the court that Mr Walker's first episode of psychiatric injury was not foreseeable raised the question of whether individuals with a history of psychiatric problems may be unfairly disadvantaged when seeking compensation. In this regard, Wessely (1995) advised that "although the desire [of the court] to secure a 'better deal' for those with psychiatric disorders is laudible, this judgment must be an 'own goal' for the prospects of those with psychological disorders" (p. 664).

The case definition received its first serious challenge in February 2002 when the Court of Appeal ruled on four conjoined appeals collectively referred to as *Hatton v Sutherland* [2002]. All four concerned psychiatric injury arising from work-related stress and all had been found in favour of the claimant at first instance. At appeal, three of the employer appeals were allowed. The judgment is important less for the details of the individual claims than for the Court of Appeal's decision to use it as an opportunity to provide a review of the structure

and operation of the case definition. This resulted in a series of sixteen guiding principles or 'practical propositions' for the interpretation and application of the ordinary principles of employer liability in work-related stress claims.

The practical propositions were welcomed in some quarters for achieving a 'via media' that recognised the serious nature of work-related stress while not penalising employers who have sought to address the issue (Smith, 2004). However, they were also vilified by others (e.g., Buchan, 2002). In becoming the focus of extensive and heated legal and psycho-legal debate the practical propositions have continued to divide opinion and generate debate on their meaning, nuance and emphasis (Patten, 2004). However, their importance cannot be underestimated for they have informed the operation of all subsequent personal injury claims for work-related stress. Furthermore, the high profile afforded to *Hatton* by the media might have contributed to the raising of the profile of personal injury claims for work-related stress among stakeholders. This, in turn, may help to explain the frequency with which participants in the study described in chapter 3 identified the personal injury case definition as key to influencing stakeholder activities on work-related stress. The influence of the media in relation to personal injury litigation for work-related stress is considered further in chapter 6.

Since publication of the practical propositions, which were designed to clarify the interpretation and application of the case definition, the courts in England and Wales have been willing or able to find few claims in favour of the claimant. This gradual tightening of the requirements for a successful psychiatric injury claim has been described as a "sharpen[ing] of the blade of exclusion...some get splattered with blood, others with money" (Trimble, 1995, p. 671). The situation

is illustrated in Table 3 which provides details on personal injury work-related stress claims on which judgment was passed in the period 1993-2007. The table was populated through interrogation of online legal databases including those of the British and Irish Legal Information Institute (BAILII) and Lawtel using keyword search terms. Excluded are claims (i) heard outside of England and Wales, (ii) involving post-traumatic stress disorder, (iii) involving bullying, and (iv) settled out of court. It is not possible to guarantee that all unreported cases have been identified here.

Post-traumatic stress disorder and bullying cases are excluded on the grounds that although there is some obvious overlap with work-related stress in terms of nature, causes and consequences, fundamental differences can be identified that have implications for how the courts deal with claims for each of these phenomena. Unlike psychological illnesses typically associated with work-related stress in personal injury claims (usually anxiety or depression), post-traumatic stress disorder may arise following a single acute traumatic exposure rather than repeated exposure to what might be considered chronic low-level hazardous psychosocial elements. This raises a unique set of questions for the courts in respect of the establishment of the foreseeability of illness, as is often evident in the claims of police officers who have witnessed traumatic events in the line of duty. Furthermore, internationally recognised diagnostic criteria exist for the psychiatric evaluation of post-traumatic stress disorder, in the form of the ICD-10 (World Health Organization, 1992) and DSM-IV (American Psychiatric Association, 1994) nosologies, which can serve to simplify the claimant's task in demonstrating the manifestation of a recognised psychiatric disorder. In contrast, work-related stress does not manifest in terms of a single named psychiatric disorder across individuals. Indeed, opinions differ on the

question of which illnesses might be associated with work-related stress; it is quite possible that all human systems may be susceptible, be they psychological or physical. The failure of work-related stress to manifest as an illness in a predictable and consistent manner distinguishes personal injury claims in this area from post-traumatic stress disorder cases. Bullying cases are excluded on the grounds that the courts have traditionally dealt with these in isolation from work-related stress claims and have not drawn heavily from legal precedent in work-related stress claims when arriving at judgments. As a result, the majority or legal and psychological literature on work-related stress in the context of personal injury litigation has not given in-depth consideration to bullying claims. In that regard the approach adopted here follows precedent.

Twenty five claims appeared before the courts in the period following *Hatton*, eight (32%) of which ultimately resulted in awards for the claimant. Fourteen of the twenty five claims were found in favour of the claimant at first instance; seven (50%) of those judgments were overturned by The Court of Appeal. In contrast, pre-*Hatton*, ten cases were judged upon by the courts, six (60%) of which resulted in judgment for the claimant at first instance. No pre-*Hatton* claim, in which the claimant was successful at first instance, was challenged in the Court of Appeal.

This evidence highlights several issues, two of which are considered here. First, overall, the courts have passed judgment on relatively few personal injury claims for work-related stress. Second, the proportion of claims that were ultimately successful post-*Hatton* (32%) was substantially lower than the pre-*Hatton* rate (50%).

Year	Title	Claim success at first instance	Appeal allowed (Court of Appeal)	Appeal allowed (House of Lords)	Award (£)
2007	<i>Daw v Intel Incorporation UK Limited</i>	YES	NO	--	134,000
2006	<i>Hiles v South Gloucestershire NHS Primary Care Trust</i>	YES	--	--	61,712
	<i>Pakenham-Walsh v Connell Residential (Private Unlimited Company) and ANR</i>	NO	NO	--	--
	<i>Sayers v Cambridgeshire County Council</i>	NO	--	--	--
2005	<i>Best v Staffordshire University</i>	YES	YES	--	--
	<i>Brooks v North Yorkshire Moors Railway</i>	NO	--	--	--
	<i>Green v Grimsby and Scunthorpe Newspapers Ltd</i>	NO	NO	--	--
	<i>Harding v The Pub Estate Company Ltd</i>	YES	YES	--	--
	<i>Hartman v South Essex Mental Health and Community Care NHS Trust</i>	YES	YES	--	--
	<i>Hone v Six Continents Retail Ltd</i>	YES	NO	--	21,840
	<i>Melville v The Home Office</i>	YES	NO	--	N/A
	<i>Moore v Welwyn Components Ltd</i>	YES	NO	--	150,00

	<i>Vahida v Fairstead House School Trust Ltd</i>	NO	NO	--	--
	<i>Wheeldon v HSBC Bank Ltd</i>	YES	NO	--	18,861
2004	<i>Barber v Somerset County Council</i>	YES	YES	YES	72,500
	<i>Bonsor v RJB Mining (U.K) Ltd</i>	YES	YES	--	--
	<i>Hyam v Havering NHS Primary Care Trust</i>	NO	--	--	--
	<i>Martindale v Oxfordshire County Council</i>	NO	--	--	--
2003	<i>Barlow v Borough of Broxbourne</i>	NO	--	--	--
	<i>Bonser v UK Coal Mining Ltd</i>	YES	YES	--	--
	<i>Croft v Broadstairs and St Peter's Town Council</i>	YES	YES	--	--
	<i>Foumeny v University of Leeds</i>	NO	NO	--	--
	<i>Pratley v Surrey County Council</i>	NO	NO	--	--
2002	<i>Bishop v Baker Refractories (Hatton conjoined case)</i>	YES	YES	--	--
	<i>Hatton v Sutherland (February)</i>	YES	YES	--	--
	<i>Jones v Sandwell Metropolitan Borough (Hatton conjoined case)</i>	YES	NO	--	157,541
	<i>Sparks v HSBC PLC (December)</i>	NO	NO	--	--

	<i>Young v Post Office (April)</i>	YES	NO	--	94,000
2001	<i>Cowley v Mersey Regional Ambulance Service NHS Trust</i>	YES	--	--	111,506
	<i>Garrett v Camden London Borough Council</i>	NO	NO	--	--
	<i>Rowntree v Commissioner of Police for the Metropolis</i>	YES	--	--	132,935
2000	<i>Willans v Rickett and Colman</i>	YES	--	--	55,383
1999	<i>Collins v Woolwich Plc</i>	NO	--	--	--
	<i>Lancaster v Birmingham City Council</i>	YES	--	--	67,041
1996	<i>Firman v British Telecom</i>	NO	--	--	--
	<i>Panting v Whitbread Plc</i>	NO	--	--	--
1995	<i>Walker v Northumberland County Council</i>	YES	--	--	175,000
1993	<i>Petch v Customs and Excise</i>	YES	YES	--	--

Table 3. Personal injury claims for work-related stress in England and Wales on which judgment was passed (1993-2007) (including awards where appropriate)

The evidence in Table 3 demonstrates that payments awarded by the courts in the period under investigation amounted to slightly less than £1,200,000. That figure, however, masks numerous out of court settlements. Reports on out of court settlements suggest that, on average, sums involved have typically exceeded that which the courts have awarded. For example, in 2000 alone, out of court settlements were reported of £203,000 for a gypsy site warden (*Ingram v Hereford and Worcester County Council*), £100,000 to a financial advisor (*North v Lloyds TSB*) and £254,362 to a teacher (*Howell v Newport County*

Borough Council). Furthermore, there is evidence to suggest that following *Walker* the number of claims initiated, if not necessarily having reached court, rose gradually before mushrooming at the turn of the century. In 2000, Trades Unions Congress affiliated unions pursued 6,428 new claims compared to only 516 in the previous year (Bryson, 2003) and in 1999 the public services trades union UNISON revealed it had around 7,000 stress cases in the pipeline (Trades Union Congress, 2000).

Data from insurers paints a picture consistent with that presented above. For example, figures from the Zurich Municipal insurance company (reported in the *Mail on Sunday*, 29 August, 2004) indicated that it had received claims for work-related stress totalling more than £50 million in a single year. Similarly, income protection claim data from Norwich Union Healthcare revealed that in 2003 mental disorders, including stress, made up 27% of claims (Norwich Union Healthcare, 2005). Insurer data likewise testifies to the fact that only a small proportion of work-related stress claims reach court. Figures for 2003 showed that claims for work-related stress constituted only 2% of 'occupational disease' personal injury claims that reached the courts (Association of British Insurers, cf. Trades Union Congress, 2005).

It is safe to conclude from the evidence above that personal injury claims for work-related stress present a problem for organisations that is potentially costly both in reputational and financial terms. Indeed, this conclusion is reinforced by the results of a 2005 survey of human resource managers (n=1,400) which suggested that 5.5% of organisations had had a personal injury work-related stress claim made against them (Mendoza, 2005). The figure of 5.5% was thought to underestimate the true state of affairs because human resource

managers would not in all cases have been aware of claims dealt with directly by the organisations' insurers.

Having described the development and scale of personal injury litigation for work-related stress, the next section describes the structure and application of the case definition involved in litigation of this type.

4.3 The personal injury case definition for work-related stress

The personal injury case definition for work-related stress is centred on the ordinary principles of employer liability that apply in tort (i.e., negligence). Thus, the standard of care owed in respect of physical injury as initially set out in *Stokes v Guest, Keen and Nettlefold (Bolts and Nuts) Ltd* [1968] is held to likewise apply to psychiatric injury. The statement on principle given in *Stokes* has been reaffirmed as the best available in several work-related stress claims. It is worth presenting here for it frames an employer's responsibilities in respect of the standard of care owed to an employee on the prevention of risk of injury arising out of work-related stress:

"...The overall test is still the conduct of the reasonable and prudent employer, taking positive thought for the safety of his workers in the light of what he knows or ought to know; where there is a recognised and general practice which has been followed for a substantial period in similar circumstances without mishap, he is entitled to follow it, unless in the light of common sense or newer knowledge it is clearly bad; but, where there is developing knowledge, he must keep reasonably abreast

of it and not be too slow to apply it; and where he has in fact greater than average knowledge of the risks, he may be thereby obliged to take more than the average or standard precautions. He must weigh up the risk in terms of the likelihood of injury occurring and the potential consequences if it does; and he must balance this against the probable effectiveness of the precautions that can be taken to meet it and the expense and inconvenience they involve. If he is found to have fallen below the standard to be properly expected of a reasonable and prudent employer in these respects, he is negligent."

In affirming that principles for the establishment of negligence for physical injury, as set out in *Stokes*, applied equally to psychiatric injury, early work-related stress claims such as *Petch* and *Walker* established that stress-related injuries should be examined by the courts using the same case definition framework as applied in claims involving physical injury. In the decade following those two claims, rapid developments were witnessed in case law for work-related stress. Although the four ordinary principles of employer liability for work-related injury have remained constant, the emphasis given to each and their interpretation has been modified with the course of time and, in particular, as a result of the *Hatton* practical propositions.

The personal injury case definition for work-related stress encompasses the four ordinary principles of liability for negligence. These require a claimant to establish that:

- a duty of care is owed by the employer to the employee (usually the claimant),

- injury was foreseeable,
- a breach occurred in the duty of care,
- injury was caused by that breach.

That the employer has a *duty to take reasonable care* for the safety of employees can usually be taken for granted (although where the claimant is a secondary victim, i.e., where injury has arisen out of witnessing harm to another, the issue can become more complex).

Often, the key to a successful claim from the claimant's perspective comes in establishing the *foreseeability* of injury. Indeed, the demonstration of foreseeability is one of the main difficulties to face claimants in work-related stress litigation (Jamdar & Byford, 2003). Once an employer is aware that an employee is experiencing health problems associated with stress at work he is, in effect, put on notice for foreseeable risk of subsequent illness and has a duty to act to prevent further illness. Failure to act appropriately may lead to any resultant psychiatric injury being considered foreseeable. The key question in the demonstration of foreseeability concerns the nature and extent of signs of impending harm that might be required to put an employer on notice of risk to the health of a worker. Guidance from the Court of Appeal in *Hatton* suggested that, broadly, "indications should be plain enough for any reasonable employer to realise that he should do something about it" (para. 31).

In failing to take steps that are reasonable in the circumstances the employer may be in *breach* of his duty of care. The question here 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*, para. 23). A key issue concerns the question of what constitutes *reasonable*

steps to prevent a breach. Guidance from the Court of Appeal in *Hatton* suggested that “What is reasonable depends, as we all know, on the foreseeability of harm, the magnitude of the risk of that harm occurring, the gravity of the harm which may take place, the cost and practicability of preventing it, and the justifications for running the risk” (para. 32).

Finally, having demonstrated breach, the claimant must establish that the particular breach in question *caused* the injury rather than work-related stress generally. It is not necessary to demonstrate that the breach was the sole cause of harm, it is sufficient to show that it made a material contribution. Where the breach was not the sole cause of harm any award of compensation will usually be reduced to reflect that. As with the other three ordinary principles, evidential challenges may arise at this stage in the case definition; demonstrating that a specific breach of duty gave rise to an injury can be fraught with difficulty. The four case definition elements and their operation is represented in Figure 10.

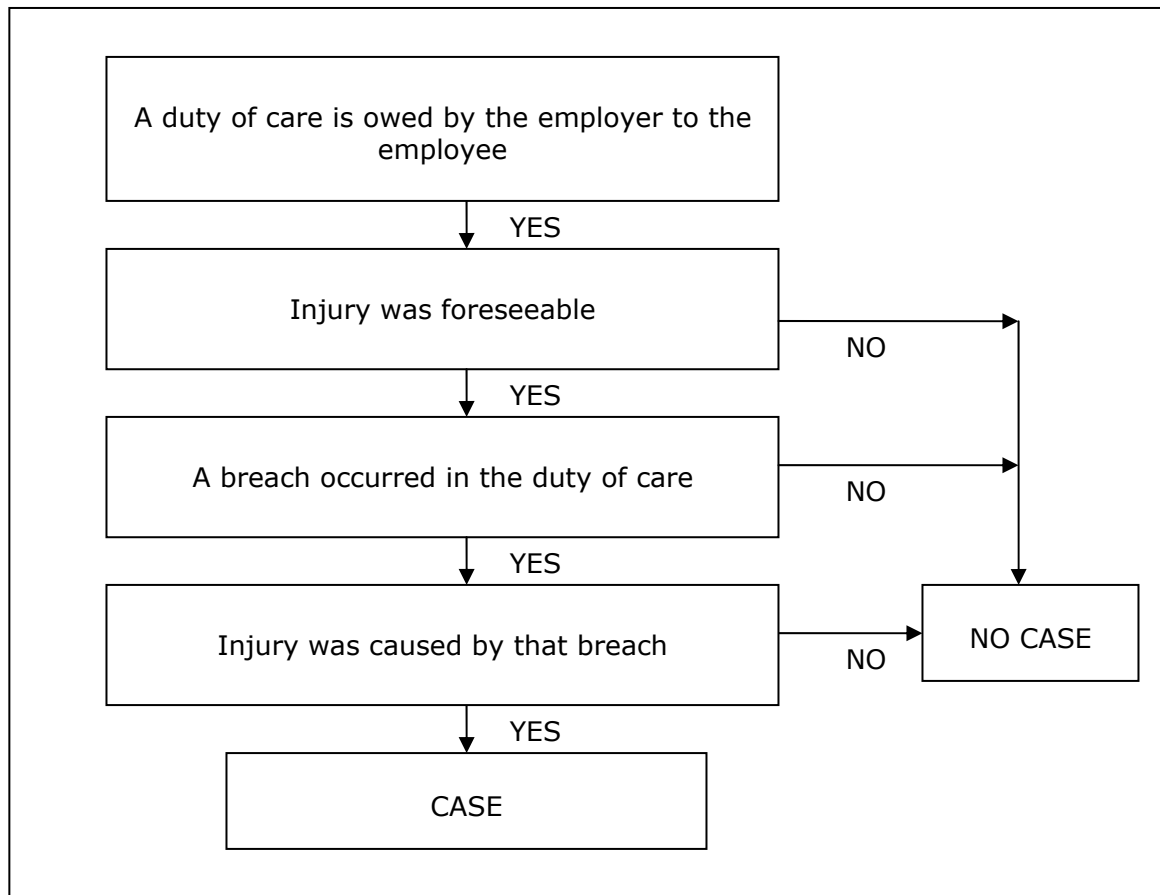


Figure 10: Flow chart representation of the personal injury case definition for work-related stress

4.4 The current investigation

Having considered the growth of personal injury litigation for work-related stress and the case definition operated therein, this chapter now turns to its central aim: an examination of consistency between the case definition that was developed in the previous chapter for use in large-scale nationally representative workforce surveys and that used in personal injury claims for work-related stress.

This study takes as its stimulus (i) the value placed by the Health and Safety Executive on consistency between the case definition developed in chapter 3 for use in large-scale nationally representative workforce surveys and others identified by subject-matter experts as important in guiding stakeholder activities on work-related stress, (ii) the identification by participants in that study of the personal injury case definition for work-related stress as a key reference point in this respect, and (iii) the desire expressed by participants for consistency, insofar as it might be possible, between the case definition developed for use in large-scale nationally representative workforce surveys and that used in personal injury litigation where work-related stress is alleged.

The study is of importance since in commissioning the study presented in chapter 3 the Health and Safety Executive held that consistency might contribute to engendering acceptance among stakeholders on the validity of the new case definition as well as the reliability of the prevalence rate that it might generate when applied within future surveys. Participants in that study echoed this position. In addition, participants noted the desirability of consistency on the grounds that it might facilitate the transparent assessment of the merits of potential legal claims and promote awareness among employees of the requirements of a successful case assessment, thereby reducing the number of speculative personal injury claims that are pursued. Overall, consistency may be of importance for galvanising support for activities targeted at the reduction of work-related stress.

4.5 Method

The mapping exercise involved an interrogation of the personal injury case definition for work-related stress against each element of the case definition

developed for use in large-scale nationally representative workforce surveys. The survey-based case definition is replicated below (Figure 9) by way of reminder and to provide a basis upon which to conduct the mapping exercise.

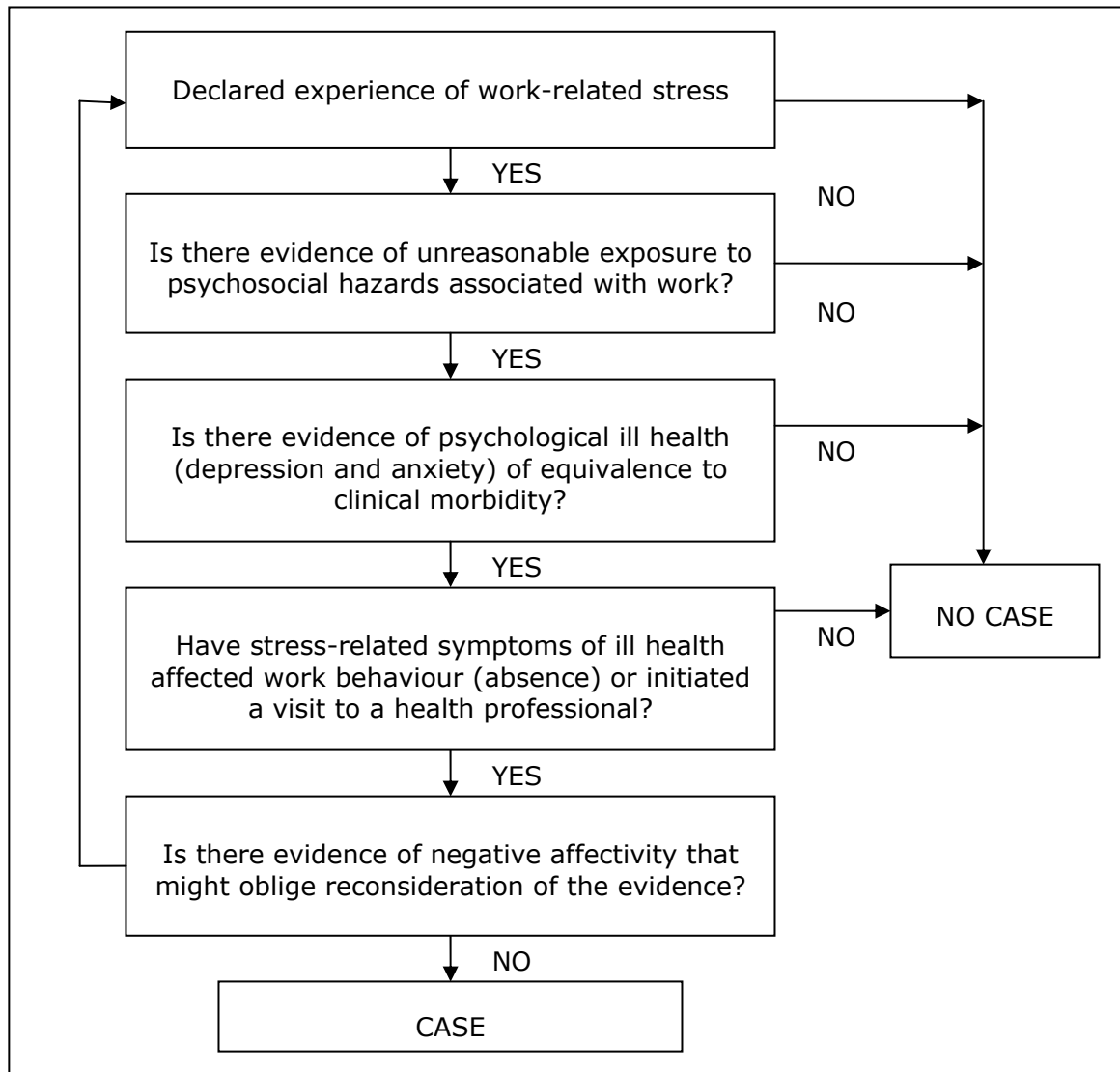


Figure 9: Framework to a case definition for work-related stress for large-scale workforce survey application

An initial visual comparison of the flow-chart representations of the two case definitions might lead to the conclusion that there appears to be little consistency between the two. However, such a conclusion may be premature.

An examination of what is required within each element of these case definitions in terms of the production of evidence might permit a more sophisticated comparison that is capable of identifying subtle areas of consistency and inconsistency. Thus, the mapping exercise was conducted at the conceptual level and the applied level, i.e., in terms of consistency of approach to measurement.

4.5.1 Data sources and analysis

Each of the five elements encompassed in the case definition developed in chapter 3 for large-scale nationally representative workforce survey application was considered separately in terms of its conceptual content and the approach that would normally be taken to its measurement in a large-scale survey context. These elements included: (i) the declared experience of harm, (ii) unreasonable psychosocial hazard exposure, (iii) psychological manifestations of harm, (iv) triangulation, and (v) negative affectivity. In addition, the case definition's overall perspective on the mediating role of stress was considered.

For each element, evidence was sought from within the personal injury case definition as it applies to work-related stress for conceptual consistency and consistency of measurement. Due to the continually evolving nature of case law, no single authoritative account exists to describe the conceptual interpretation and practical operation of the personal injury case definition. In the absence of such a document, evidence was drawn from the text that is widely accepted by stakeholders to be the most authoritative available: the Court of Appeal judgment in the influential case of *Hatton v Sutherland* [2002]. As described previously, *Hatton* is of particular importance owing to the attempt of the lead

judge, Lady Justice Hale, to use the case as an opportunity to clarify the operation of the personal injury case definition as it relates to work-related stress through a series of 16 practical propositions. The Hale practical propositions on the interpretation and application of the ordinary principles of employer liability (the case definition) as they apply in personal injury claims for work-related stress are listed in full in Appendix III. Where the *Hatton* practical propositions failed to provide evidence that might illustrate the degree of consistency that exists between the two case definitions, evidence was considered from the judgments associated with alternative personal injury claims for work-related stress.

4.6 Results

4.6.1 The mediating role of stress

In the discernment of the case definition described in chapter 3, the first theme that was evident in the participant narratives concerned the imperative for a survey-based case definition to encompass a multi-factorial assessment framework. Such was advocated in preference to the alternative single-item 'how stressful do you find your job?' approach. In this way, the case definition that was developed conceived of a transactional stress process that consisted of (i) antecedent factors, (ii) cognitive perceptual processes that give rise to the emotional experience of stress, and (iii) correlates of that experience (Cox, 1978; Cox & Griffiths, 1995).

The personal injury case definition for work-related stress likewise conceives of a transactional stress process. No attempt is made to measure stress directly. Rather, consistent with the survey-based case definition, evidence is required of psychosocial hazard exposures, health outcomes, complaints (that include possible presentation to a healthcare practitioner) and confounding variables.

Indeed, in the context of personal injury claims for work-related stress, the courts have stated explicitly that “stress...is a psychological phenomenon but it can lead to either physical or mental ill-health or both” (*Hatton v Sutherland* [2002] para. 10) and that stress is “...an injury to health (as distinct from occupational stress)” (ibid. para. 43) (parenthesis in original). In this way, the courts have overtly conveyed their position that stress plays a mediating role in the dynamic transaction between a worker and his or her work, i.e., that it is “a state of mind that can cause injury” (Buchan, 2001).

4.6.2 Declared experience of harm

The first theme evident in participant narratives on the question of elements that might be included in a case definition for use in large-scale surveys concerned the importance of a screening question. Such may be used to identify individuals who perceive that they are experiencing stress-related impairment to their health at the time of assessment. An affirmative response to a screening question is usually required to trigger the remainder of a case assessment. Screening questions used in large-scale nationally representative workforce surveys in Britain have generally been consistent with that used in SWI98/99: *Within the last twelve months have you suffered from any illness, disability or*

other physical or mental problem that was caused or made worse by your job or work done in the past?

In the sense that the screening question requires an initial self-reported declaration of work-related stress or a health problem that might be stress-related and attributable to work, consistency can be identified between the two case definitions. Within the personal injury case definition it is incumbent upon the claimant to have made his employer aware that his work had a deleterious effect on his health. Such a complaint is central to the establishment of the foreseeability of subsequent illness for it places the employer on notice of risk of impending injury and triggers a duty to take steps to reduce that risk. The Court of Appeal in *Hatton* sought to clarify the operation of this element of the case definition by noting that:

"More important are the signs from the employee himself. Here again, it is important to distinguish between signs of stress and signs of impending harm to health...If the employee or his doctor makes it plain that unless something is done to help there is a clear risk of a breakdown in mental or physical health, then the employer will have to think about what can be done about it" (para. 27).

The judgment went on to observe that:

"Factors to take into account [when judging whether harm was foreseeable] would be...complaints made about it by the employee or from warnings given by the employee or others around him" (para. 28).

In contrast to the relatively straightforward and uncontested approach to the initial declaration of harm in large-scale surveys, there is some debate within the context of the personal injury case definition about the degree to which an employee must be explicit in his complaint or in the demonstration of signs of harm. This debate is examined in detail in the following chapter.

It may be concluded that the evidence for consistency between the two case definitions in respect of the requirement for an initial declaration of harm is mixed. At a conceptual level, consistency is evident in the sense that both require a self-reported declaration that triggers a series of further stages in the case assessment process. At the level of application, it is more difficult to draw comparisons between the case definitions in terms of the routes by which declarations might be made. The survey-based approach involves a method based on the use of a single question and which is relatively uncomplicated and uncontested. In contrast, extensive debate exists in the personal injury domain on the characteristics of an initial declaration that might be required within a successful case assessment.

4.6.3 Unreasonable psychosocial hazard exposure

The study described in chapter 3 revealed the centrality of reports of unreasonable psychosocial hazard exposures to a case definition for work-related stress for use in large-scale nationally representative workforce surveys. Two contrasting assessment methods were suggested by participants in that study. First, it was posited that exposure might be considered unreasonable where self-reported exposures and health impairments co-occur. Second, it was suggested that exposure might be considered unreasonable when an employee

has made a complaint to his employer about stress-related harm and the employer has responded inadequately in terms of considering modifications that might reasonably be made to the psychosocial work environment. This latter perspective was advanced on the basis that it was perceived to be consistent with the approach taken in personal injury litigation.

The personal injury case definition likewise places importance on evidence of unreasonable psychosocial hazard exposures. Indeed, the latter approach to the assessment of such advocated by participants in the study described in chapter 3 offers consistency with the personal injury case definition. This conceives of unreasonable psychosocial hazard exposures potentially occurring following a breach in the duty of care owed to an employee upon an employer's failure to act reasonably once put on notice of risk of impending harm to health in that employee.

Guidance can be found in the *Hatton* practical propositions on the question of what constitutes reasonable action on the part of the employer to avert a breach in his duty of care to an employee (and possible subsequent unreasonable psychosocial hazard exposure) once he is aware of there being a foreseeable risk of harm to that employee. In this regard, three of the practical propositions noted that:

"The employer is only in breach of duty if he has failed to take the steps which are reasonable in the circumstances, bearing in mind the magnitude of the risk of harm occurring, the gravity of the harm which may occur, the costs and practicability of preventing it, and the justifications for running the risk" (para. 43 (8)).

“The size and scope of the employer’s operation, its resources and the demands it faces are relevant in deciding what is reasonable; these include the interests of other employees and the need to treat them fairly, for example, in any redistribution of duties” (para. 43 (9)).

“An employer can only reasonably be expected to take steps which are likely to do some good: the court is likely to need expert advice on this” (para. 43 (10)).

There is considerable legal debate surrounding the adequacy and applicability of these *Hatton* practical propositions. This debate is examined in detail in chapter 5.

It may be concluded that the large-scale survey-based and personal injury case definitions are conceptually consistent in the sense that both require evidence of unreasonable psychosocial hazard exposure. However, dependent upon which of the two approaches to measurement advocated by participants in the study described in chapter 3 might be adopted in future surveys, the evidence gathering process may be a source of methodological inconsistency. The first approach, whereby psychosocial hazard exposures might be considered unreasonable where self-reported exposures and health outcomes co-occur, may offer less consistency with the personal injury case definition than the second method. That approach involved evidence of unreasonable exposure possibly occurring in response to an employer having taken inadequate steps once on notice of foreseeable risk of harm to an employee in terms of having undertaken an examination of modifications to the psychosocial work

environment that might reasonably have been introduced to avoid a breach in the duty of care owed.

4.6.4 Psychological manifestations of harm

The third element of the case definition developed in chapter 3 concerned psychological manifestations of harm. These were restricted to symptoms of depression and anxiety that in terms of severity were of clinical equivalence, i.e., of a magnitude sufficient to warrant psychiatric diagnosis.

On this point consistency can be found between the two case definitions. Indeed, the narratives of several study participants, particularly insurers and legal professionals, noted that this restriction of symptoms would enhance consistency between the large-scale survey-based and personal injury case definitions for work-related stress.

As suggested above, the personal injury case definition for work-related stress has traditionally had its focus on (i) clinical diagnosis of (ii) psychological symptoms of ill health, in particular, symptoms of anxiety or depression. In these respects there is direct consistency between the two case definitions.

The personal injury case definition has traditionally not considered evidence of physical symptoms of work-related stress. Rather, litigators have taken their lead from the early psychiatric injury claim of *McLoughlin v O'Brian* [1983] in which the judge held that "The first hurdle which a plaintiff claiming damages of the kind in question must surmount is to establish that he is suffering not merely from grief, distress or any other normal emotion but a positive

psychiatric illness” (para. 431). Nevertheless, it is noteworthy that although the courts have not been required to pass judgment on a personal injury claim for work-related stress that involves evidence of physical injury, there is no reason in law for such claims to be precluded. Indeed, the courts have accepted that work-related stress may manifest in either psychological or physical terms. For example, in the case of *Harding v The Pub Estate Company Ltd* [2005], the Court of Appeal observed that: “Most of these [work-related stress] cases have been concerned with psychiatric injury. But to my mind it makes no difference to the issue of liability that the injury in fact suffered by the respondent in the present case was a heart attack rather than a psychiatric breakdown” (para 4). Furthermore, it is worth recalling the earliest ‘nervous shock’ cases, that would today be referred to as psychiatric post-traumatic stress claims, involved physical injuries including miscarriage (*Dulieu v White and Sons* [1901]) and still-birth (*Bourhill v Young* [1943]).

Although conceptually consistent, in practice, contrasting approaches to the generation of evidence on psychiatric illness are applied in the personal injury and large-scale survey domains. The personal injury case definition requires formal psychiatric diagnosis by an appropriately trained medical professional within the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV; American Psychiatric Association, 1994) or International Classification of Diseases (ICD-10; World Health Organization, 1992) frameworks. In the large-scale survey domain it is typically considered sufficient to gather self-reported evidence of symptoms that might equate to psychiatric morbidity if the individual were to submit to formal psychiatric diagnosis.

4.6.5 Triangulation: Sickness absence and presentations to health professionals

The fourth element of the case definition developed for use in large-scale nationally representative workforce surveys concerned the triangulation of evidence of psychosocial hazard exposures and harm to health. Two approaches to triangulation emerged as themes in the data: (i) the integration of self-reported absence data relating to work-related stress as a means of examining changes in work performance and (ii) presentations to a healthcare professional for work-related stress or stress-related symptoms.

The personal injury case definition likewise requires evidence of what might be considered 'objective' evidence for triangulation purposes. The case definition considers both absence data and presentations to a healthcare professional as sources of evidence.

In respect of absence data, the *Hatton* practical propositions made clear that the courts will consider absence from work as a sign to the employer of impending harm to health that is relevant to the establishment of the foreseeability of psychiatric illness. The propositions noted that, "...factors to take into account would be frequent or prolonged absences from work which are uncharacteristic for the person concerned; these could be for physical or psychological complaints..." (para. 28). The same judgment also noted the relevance of a claimant's colleagues' absence as indicative of a generalised problem with stress in the organisation: "Also relevant is whether there are signs that others doing the same work are under harmful levels of stress. There may be others who have already suffered injury to their health arising from their work. Or there

may be an abnormal level of sickness and absence amongst others at the same grade or in the same department” (para. 26).

On the question of the status of evidence on presentations to a healthcare professional within a case assessment, *Hatton* made mention of the role of the general practitioner in the context of a discussion on the sufficiency of medical evidence for putting an employer on notice of risk of foreseeable harm in an employee. It was noted that: “If the employee or his doctor makes it plain that unless something is done to help there is a clear risk of a breakdown in mental or physical health, then the employer will have to think what can be done about it” (para. 27). Certain personal injury claims that followed *Hatton* similarly demonstrated the expectation of the courts that a complaint of work-related stress to a general practitioner is beneficial to the establishment of foreseeability of risk (e.g., *Pakenham-Walsh v Connell Residential (Private Limited Company) and ANR* [2006]).

In sum, it can be concluded that consistency exists between the two case definitions on the question of triangulation of evidence. Both consider sickness absence data and evidence provided by a healthcare professional within their assessment schedules. Contrast can be identified between the case definitions at the level of data collection methodology. Whereas the large-scale survey methodology requires that participant responses are usually of the self-report kind, the personal injury case definition is more likely to employ direct reference to medical documentation and organisational sickness absence records.

4.6.6 Negative affectivity

The final element of the case definition designed for large-scale survey application centred on the question of whether there was evidence of negative affectivity that might force a reconsideration of the evidence gathered at previous stages. Analysis of participant narratives revealed an acknowledgment that a host of factors may moderate the relationship between psychosocial hazard exposures and health including those of a personality/dispositional, situational or social nature. For purposes of the development of a case definition that was deemed fit for purpose across stakeholder groups, there was agreement that the focus of assessment might be pragmatically restricted to evidence of negative affectivity.

The personal injury case definition for work-related stress likewise considers whether there is evidence of non-work-related factors that might account for stress-related health problems. Although no explicit mention has been made in extant case law of the negative affectivity construct, frequent reference has been made in claims to other personality variables that might offer an alternative causal explanation for an illness. Indeed, the defendant's legal experts often actively seek to find personality/dispositional factors that might otherwise account for the alleged stress-related problems. One such example is the 'rigid personality' the defendant's medical expert ascribed to the claimant in *Walker*.

It may be concluded that in respect of negative affectivity there is a high degree of consistency between the two case definitions. Both involve the proactive examination of personality variables that might provide an alternative causal

explanation for stress-related problems. However, whereas examination of personality variables in the survey-based case definition is restricted to negative affectivity, in contrast, the personal injury case definition, by virtue of the nature of the adversarial litigation process, involves the consideration of a broader range of personality/dispositional, situational and social factors.

4.7 Discussion

The investigation described in the current chapter involved the mapping of the personal injury case definition for work-related stress onto the large-scale survey-based case definition that was developed in chapter 3. The mapping activity permitted the identification of dimensions of consistency and inconsistency between the two case definitions. This study has shown that the personal injury case definition can be successfully mapped onto each element of the survey-based case definition. At the conceptual level, both were shown to involve:

- a multi-factorial perspective on work-related stress
- an assessment schedule that was initiated by a declaration of work-related stress or stress-related problem
- a requirement for evidence of unreasonable psychosocial hazard exposures
- a focus on psychological health in respect of evidence of stress-related harm
- a clinical-equivalence threshold in respect of the severity of psychological symptoms of stress-related ill-health

- the consideration of evidence of absence from work and/or visits to a healthcare professional for purposes of data triangulation
- mechanisms to identify alternative possible personality-based causes of stress-related problems

Although consistency was strong at the conceptual level, it was less evident in respect of the data collection methodologies associated with each case definition element. Large-scale nationally representative workforce surveys that include case definitions for work-related stress generally rely on self-reports and can usually be completed in a space of a few minutes. Indeed, expedience in data collection is a pragmatic imperative in such case definitions. In contrast, data collection for purposes of personal injury litigation incorporates not only self-reports from the claimant but also organisational and medical documentary evidence plus statements drawn from numerous individuals including healthcare professionals and colleagues over a period of months or years. It can be concluded that reform of the data collection methods used in association with either of these case definitions could enhance consistency; however, both use data collection techniques that are embedded and considered fit for purpose within the respective domains of activity. Reform to either might therefore prove difficult.

Despite the potential difficulties, research activities for the enhancement of consistency between these two case definitions might be considered useful. As noted previously, in commissioning the development of a new case definition for use in large-scale nationally representative workforce surveys, the Health and Safety Executive placed value on consistency of design between that case definition and others identified by stakeholders as being important to informing

their activities on tackling work-related stress. It was held that consistency would serve to maximise acceptance among stakeholders on the validity of the new case definition as well as the reliability of the prevalence rate that it might generate when applied within future surveys. Acceptance among stakeholders on these points was considered important for galvanising support for activities targeted at the reduction of work-related stress. The value placed by the Health and Safety Executive on consistency was likewise reflected in participant narratives in that study. These identified the case definition used in personal injury litigation for work-related stress as being particularly salient in this regard. Participants held that consistency might (i) help foster agreement across stakeholder groups on the acceptability of statistics on the scale of work-related stress generated by future large-scale surveys that use the new case definition, (ii) facilitate the transparent assessment of the merits of potential legal claims, and (iii) promote awareness among employees of the requirements for a successful case assessment and thereby reduce the number of speculative personal injury claims that are pursued. Thus, it is evident that the enhancement of consistency between these two case definitions might yield benefits for policy and practice on the control and prevention of work-related stress. As such, research is warranted on developments that would allow the survey-based case definition to maintain its theoretical integrity and support among stakeholder groups while increasing its consistency with the personal injury case definition.

Consistency between the two case definitions might alternatively be enhanced through the development of the personal injury case definition. An impetus exists for such; participant narratives in the study described in chapter 3 revealed a perception of the personal injury case definition as being confusing,

difficult to apply in practice and in need of reform. Some noted that reform might serve to enhance consistency. Furthermore, the analysis presented in this chapter has illustrated the absence of clarity and consistency in respect of the courts' application of the personal injury case definition. Thus, with a view towards the enhancement of consistency between the two case definitions of interest, the scope for reform of the personal injury case definition is considered in the next chapter.

4.8 Conclusion

Perhaps ahead of their time, Barton and Lazarsfeld (1969) stated that "like the nets of deep-sea explorers, qualitative studies may pull up unexpected and striking things for us to gaze on" (p.166). This was indeed the case in the research described in chapter 3 that identified two points that are of particular interest here. First, the personal injury case definition for work-related stress was identified as a key reference point in terms of informing stakeholder activities on work-related stress. Second, desire was evident in the participant narratives for consistency, insofar as it might be possible, between the case definition developed for use in large-scale nationally representative workforce surveys and that used in personal injury litigation where work-related stress is alleged. This chapter has taken these findings and the value placed on consistency by the Health and Safety Executive, as its stimulus. It has shown that (i) there is a high degree of conceptual consistency between these two case definitions and (ii) differences in data collection methodologies place limitations on consistency at the level of application. The need for further research that might yield opportunities for the enhancement of consistency has been identified. One avenue for further research that was discussed concerned investigations into the scope for reform of the personal injury case definition for work-related stress. It is to such an investigation that the next chapter turns.

5. THE PERSONAL INJURY CASE DEFINITION FOR WORK-RELATED STRESS: ISSUES OF STRUCTURE AND APPLICATION

This chapter takes as its starting point key findings and conclusions from chapters 3 and 4. These highlighted (i) the importance of the personal injury case definition for work-related stress on influencing the stress management activities of employers, trades unions, insurers, legal professionals and other stakeholder groups, (ii) concern among stakeholders in respect of uncertainty surrounding the structure and application of that case definition as well as the need for its reform, (iii) the value placed by stakeholders on consistency between the personal injury case definition and that developed for large-scale workforce survey application, and (iv) possible scope for the enhancement of consistency through the development of the personal injury case definition. A study is presented that involves an examination of structural and applied issues associated with the personal injury case definition as it relates to work-related stress. The investigation is based upon a content analysis of all 28 court judgments covering the period 2002-2007. The results provide a foundation upon which to (i) make recommendations for the development of guidance for clarification of the structure and application of the case definition, (ii) make suggestions on reform of the case definition, and (iii) consider the role of theory and empirical evidence from occupational health psychology in these activities that might serve to clarify and enhance the degree of consistency achievable between the personal injury and survey-based case definition.

5.1 Introduction

The studies presented in chapters 3 and 4 demonstrated the interactions between survey-based case definitions for work-related stress, the case definition used in personal injury litigation for work-related stress and stakeholder activities on tackling the challenge to occupational health presented by work-related stress. These findings are consistent with previous case study research conducted for the Health and Safety Executive which has identified the rise in personal injury litigation for work-related stress witnessed since the mid 1990s among the factors that have motivated organisations to act on tackling the problem (Cox et al., 2007; Tasho et al., 2005).

Not only did the study presented in chapter 3 reveal the centrality of the personal injury case definition to informing stakeholder activities, it also identified concern among subject-matter experts in respect of the structure, interpretation and application of that case definition as well as the need for its reform. Calls were evident in participant narratives for the production of guidance in these respects.

The study further showed that subject-matter experts valued consistency, insofar as it might be achievable, between this case definition and that developed for large-scale workforce survey application. Several study participants held that consistency might be enhanced through development of the personal injury case definition. The existing level of consistency between these two case definitions was examined in chapter 4. That chapter concluded by noting that consistency might be enhanced through clarification and

development of the personal injury case definition and that such activities would contribute to meeting the need for the development of guidance for stakeholders on its structure, interpretation and application.

This chapter takes these findings as its starting point. It begins by considering the role of research in occupational health psychology in addressing legal questions. That is followed by a discourse on the scope for reform of the personal injury case definition for work-related stress. A study is presented that examines problematic issues of structure and application associated with this case definition. The study is based upon a content analysis of court judgments. The results of the analysis are used as a foundation upon which to (i) make recommendations for the development of guidance for clarification of the structure, interpretation and application of the case definition, (ii) make recommendations on reform of the case definition, and (iii) consider the role of occupational health psychology in these activities that might serve to clarify and enhance the degree of consistency achievable between the personal injury and survey-based case definition.

5.2 Legal questions in occupational health psychology

The personal injury case definition as it applies to work-related stress is a psycho-legal one; both psychological and legal factors must be present within a successful case assessment. Almost all published scholarly and policy orientated examination of the case definition has been conducted from a legal standpoint; a surprising state of affairs in view of the importance of the psychological dimension therein. Although psychological aspects of the case definition and their interplay with the legal dimension have been neglected by researchers and policy makers, the studies described in chapters 3 and 4 demonstrated the

imperative for an examination that acknowledges the case definition's psychological dimension. As such, this area may usefully be examined from an occupational health psychology perspective.

It has been suggested that "the law takes only established authority as its arbiter, trials being attempts to maintain the present in the past, to re-establish the status quo, and to fossilize rather than erode the conceptual boundaries of the discipline" (Trimble, 1995, p. 671). Nevertheless, the imperative for the contribution of knowledge from occupational health psychology to this area has been made explicit in case law that has emphasised employer responsibilities for the promotion of worker health by reference to the European Framework Directive on Health and Safety at Work (Directive 89/391: European Commission, 1989). Key aspects of the Directive that have been highlighted in work-related stress cases include the requirement upon employers to, among other things, keep abreast of knowledge developments (as they relate to work-related stress) and to be expedient in the application of that knowledge (e.g., *Barber v Somerset County Council* [2004]). It has been suggested that the question of whether an employer has kept up to date in these respects could be critical to some future work-related stress claims (Buchan, 2004a). Evidence for the potential contribution of occupational health psychology to the development of research on work-related stress and the translation of that research into stakeholder guidance can also be found in the suggestion that guidance on work-related stress relied upon by the Court of Appeal in *Hatton v Sutherland* [2002] might have been out of date and that all of the available literature used by the House of Lords in 2004 in *Barber* had been published prior to and including 2001 (Buchan, 2004b, 2007). These observations identify a role for occupational health psychology in addressing legal questions as they relate to

work-related stress through research and the translation of scientific findings into stakeholder guidance.

Occupational health psychology is, by definition, an applied science (Cox, Baldursson & Rial González, 2000; Schaufeli, 2004). Since its inception as a coherent and discrete discipline in the early 1990s it has provided a structure for research on the dynamic relationship between work and health and the proactive dissemination of that research. Within this framework, psycho-legal research has emerged as a topic area. Examination of the contents of *Work and Stress*, the leading Europe-based peer-reviewed journal in the discipline, shows that legal issues as they relate to the health of workers have been subject to a growth in academic interest since the mid 1990s (e.g., Kompier, De Gier, Smulders & Draaisma, 1994). A number of papers have appeared in the journal that concern English law as it relates to work-related stress (Barrett, 1995; Barrett, 1998; Earnshaw & Cooper, 1994; Leighton, 1994).

Academic interest in legal matters among occupational health psychologists might be considered appropriate in view of the intimate linkage between the law and occupational health activities within organisations. Furthermore, an attempt to bring together occupational health psychology with English legal issues as they relate to work-related stress in the personal injury context is warranted in view of the neglected status of the latter in the scientific literature that has more commonly focused on 'shock' cases involving psychiatric injury arising out of accidents and trauma at work. The law does not work in a vacuum; increasingly it must turn to the social sciences to help it deal adequately with contemporary work-related health problems.

5.3 Reform of the personal injury case definition for work-related stress

A study that has as its focus an examination of problematic aspects of the structure and application of the case definition used in personal injury litigation for work-related stress might only be considered useful should there be evidence that (i) the need for reform has been identified and (ii) there is a realistic possibility that conclusions and recommendations that arise out of academic research may influence real-world developments, i.e., there exists scope for case definition reform. These issues are discussed below as a foundation for the study that follows.

5.3.1 The scope for reform

To answer the question of whether there exists a need for developments in the personal injury case definition as it applies to work-related stress, it is necessary to consider whether stakeholders would benefit from possible developments.

The evidence from the study described in chapter 3 suggests that stakeholders would indeed benefit from enhanced clarity on the personal injury case definition as it applies to work-related stress. Subject-matter expert narratives revealed the centrality of the case definition to informing activities on tackling work-related stress as well as misgivings about its structure and application. Calls were evident for enhanced clarity as well as reform of the case definition. Narratives revealed that reform of the most problematic aspects of the case definition would be welcomed, especially where such developments could help to

facilitate the prediction of claim outcomes. It was also noted that reform might enhance consistency (or at least clarify the position on consistency) between this case definition and that developed in chapter 3 for use in large-scale nationally representative workforce surveys.

Case law and legal commentary supports the views expressed in participant narratives. In 1994, prior to the proliferation of personal injury claims for work-related stress triggered by *Walker v Northumberland County Council* [1995], four issues associated with the personal injury case definition for work-related stress were identified that, it was anticipated, would determine the success of future claims. These concerned the claimant's ability to demonstrate (i) the presence of a stress-related illness, (ii) the causal link between a stress-related illness and a hazardous psychosocial environment, (iii) the foreseeability of an illness, and (iv) what an employer might reasonably be expected to do in terms of actions to prevent a repetition of illness once put on notice of risk to health (Earnshaw & Cooper, 1994). Earnshaw and Cooper (ibid) anticipated a series of difficulties surrounding each issue, many of which have since manifested. For example, in relation to the question of causation, it was predicted that where non-work factors might have contributed to the development of a stress-related illness, the defence counsel (acting on behalf of the employer) would, in all likelihood, exploit this line of questioning in cross examination – a situation that has arisen repeatedly in court proceedings. Around the same time Colman J, in his seminal judgment in *Walker*, similarly recognised that application of the personal injury case definition might prove difficult in work-related stress claims, particularly in relation to questions of foreseeability and causation. This prediction has likewise been borne out; numerous cases have failed to reach the

courts owing to evidential problems in these areas. Among those that have reached court, many have failed at these hurdles.

More than a decade after *Walker*, the guiding principles established in that case continue to apply and problems in their interpretation and application remain. As such, a critique of the law in this area and a consideration of the case for reform may be timely. Such an undertaking could potentially produce benefits to claimants, employers, insurers and legal professionals alike. Clarity on the structure, interpretation and application of the case definition would enhance predictability of claim outcome. This, in turn, might reduce the number of speculative claims and in doing so reduce the emotional trauma for individuals who might otherwise have set forth on an ill-advised and drawn out litigation process. Such was intimated by the judge in *Hartman v South Essex Mental Health and Community Care NHS Trust* [2005] who observed that the shortcomings of the personal injury case definition as it applies to work-related stress, notably the confusion surrounding its structure and application, has led the courts to dedicate periods of time to claims that are disproportionate “to the real issues in the case and the true value of the claim” (para. 3).

5.3.2 Research evidence from occupational health psychology in recommendations on reform

To answer the question of whether the analysis presented in the current chapter could have real world influence it is necessary to consider whether the case definition might be receptive to development on the basis of recommendations underpinned by the scientific occupational health psychology literature. This question may be addressed through a consideration of previous attempts at

clarification and reform of relevant law through (i) the courts and (ii) reports from authoritative bodies.

The most notable attempt of the courts to review how work-related stress is dealt with in personal injury litigation occurred in *Hatton v Sutherland* [2002]. In the Court of Appeal, Hale LJ observed that personal injury claims for work-related stress presented a growth area in view of a 'developing understanding' of psychiatric ill health and work-related stress. The observation could be interpreted as a suggestion that the tests which determine liability might be receptive to development as scientific knowledge unfolds. As described in chapter 4, the Court of Appeal used *Hatton* as an opportunity to set out a series of practical propositions on the interpretation and application of the ordinary principles of employer liability (the case definition) in stress claims. Unfortunately, the practical propositions appeared to generate more questions than they answered and made it difficult to predict the outcome of claims (Zindani & Korn, 2004). Indeed, the confusion created by *Hatton* led some commentators to observe that as a result a claimant can have little confidence of securing compensation (Barrett, 2004) and that the practical propositions turned common law back to the 1980s (Buchan, 2002). Nevertheless, *Hatton* revealed that the personal injury case definition as it relates to work-related stress is receptive to development. It further demonstrated that the neglect of contemporary scientific evidence on the nature of work-related stress in the interpretation of law and development of the practical propositions engendered a confused legal scene.

Following *Hatton*, the House of Lords was invited to reconsider one of the four conjoined cases which the Court of Appeal had previously found in favour of the

employer. That case, *Barber v Somerset County Council* [2004], was eagerly anticipated by personal injury practitioners (Russell, 2004) and regarded as an opportunity for a root and branch review of how personal injury claims for work-related stress are dealt with by the courts (Zindani & Korn, 2004). Not least among the questions that it was anticipated *Barber* would address which had been left hanging by *Hatton* concerned the question of whether employers could henceforth safely ignore work-related stress in the absence of an employee complaint of such (Buchan, 2002). Ultimately, *Barber* failed to achieve its potential owing to the restricted points of law on which the case was heard (Patten, 2004). Although the House of Lords found in favour of Mr Barber, the judgment did not contest *Hatton* and the practical propositions (Russell, 2004). *Barber* did, however, highlight the duty of employers to conduct psychosocial risk assessment. In this way the judgment promoted the organisational application of procedures derived from the field of occupational health psychology that have a bearing on legal issues.

Both *Hatton* and *Barber* held the potential to clarify and develop the personal injury case definition as it applies in claims for work-related stress and to use research evidence from occupational health psychology to those ends. Indeed, both acknowledged the role of scientific developments on work-related stress in informing the decisions of the courts. However, both added to the confusion surrounding the interpretation and application of the case definition. Indeed, a year after *Barber*, the Court of Appeal sitting in *Hartman* concluded:

"It is apparent, despite the decisions of the Court of Appeal in Hatton v Sutherland [2002] 2 ALL ER 1, the House of Lords in Barber v Somerset County Council [2004] 1 WLR 1089 and the guidance laid down in those

cases...judges are still finding difficulty in applying the appropriate principles in claims arising from stress at work" (para. 1).

Beyond case law there is evidence to suggest that the law in this area might be receptive to reform. Tasked with considering reform to the case definition for psychiatric injury arising from the death, injury or imperilment of someone other than the claimant, the Law Commission set out a review of that case definition and presented a series of recommendations on reform of its most anomalous aspects (Law Commission, 1998). A critique of the Law Commission's examination of the law and recommendations conducted through reference to the legal and applied psychological literatures appeared in the occupational health psychology journal *Work & Stress* shortly thereafter (Barrett, 1998). The fact that the Law Commission was willing and able to review an area of law closely related to the subject of interest in the current chapter suggests that a review of the personal injury case definition for work-related stress may not be inconceivable.

The Law Commission's (1998) report may also help to explain why personal injury litigation for work-related stress has rarely been considered in the occupational health psychology literature. The report made a number of recommendations on reform of the law on negligently inflicted psychiatric illness as a result of death, injury or imperilment. However, it stopped short of making recommendations on reform to the law as it applies to psychiatric injury that has arisen out of work-related stress. It was held that results from a previous consultation exercise (Law Commission, 1995) made such recommendations unnecessary: 93% of respondents had agreed with the Law Commission's provisional view that, "subject to standard defenses, there should be liability

where an employer has negligently overburdened its employee with work thereby foreseeably causing him or her to suffer a psychiatric illness" (para. 7.20), i.e., the personal injury case definition could be applied to work-related stress without modification. It was held that no recommendations on reform were required at that point in time for, "the reasoning of Colman J in *Walker v Northumberland County Council* seemed to us to constitute a logical and just application of the law on safety at work to psychiatric illness" (para. 7.20). Nevertheless, the Law Commission did observe that the *Walker* decision raised 'a number of difficult issues' and left unresolved numerous 'uncertainties'. The Law Commission found itself reluctant to address these issues and uncertainties at a time when the common law in the area was in a period of fast paced development. However, a substantial body of case law has since developed alongside scientific developments that render it timely to review the case definition applied in personal injury litigation for work-related stress.

Reform can be achieved in two ways. First, through legislation that can "cure the defects of the common law at a stroke and with certainty" (Law Commission, 1998, p. 56). Alternatively, case law can be permitted to develop incrementally through judicial decisions. The latter route is advocated as preferable except for where it is believed that the law has taken a dramatically wrong turn, where the government of the day feels that insufficient cases are coming to court to allow the law to develop or conversely where it believes that too many cases have been brought, particularly where conflicting decisions have arisen (ibid). The stance adopted in this chapter is that the law as it applies to work-related stress in personal injury cases has not taken a dramatically wrong turn; rather, the application of the ordinary principles of employer liability to work-related stress is appropriate for it locates psychosocial risk within the same occupational

health and safety framework as physical risk. However, it is suggested that the interpretation and application of those principles as they relate to work-related stress needs to be clarified and brought in line with scientific research findings from occupational health psychology and related fields. Such would allow for activities directed at the further enhancement of consistency between the personal injury case definition and that developed in chapter 3 for large-scale survey application.

This section, and that which precedes it, have established the relevance of this area of investigation to scientific enquiry in occupational health psychology and the scope for critique and reform of the personal injury case definition as it applies to work-related stress. The chapter next revisits this case definition before describing the methodology used to guide its critical examination.

5.4 The personal injury case definition for work-related stress

The case definition that operates in personal injury claims for work-related stress was described in detail in chapter 4. It is sufficient here to reiterate that the case definition can be distilled down to four elements: the ordinary principles of employer liability. These require a claimant to establish that:

- a duty of care is owed by the employer to the employee (usually the claimant)
- injury was foreseeable
- a breach occurred in the duty of care
- injury was caused by that breach

The principles and their application were represented in a case definition decision flow chart (Figure 10) that is replicated here by way of reminder.

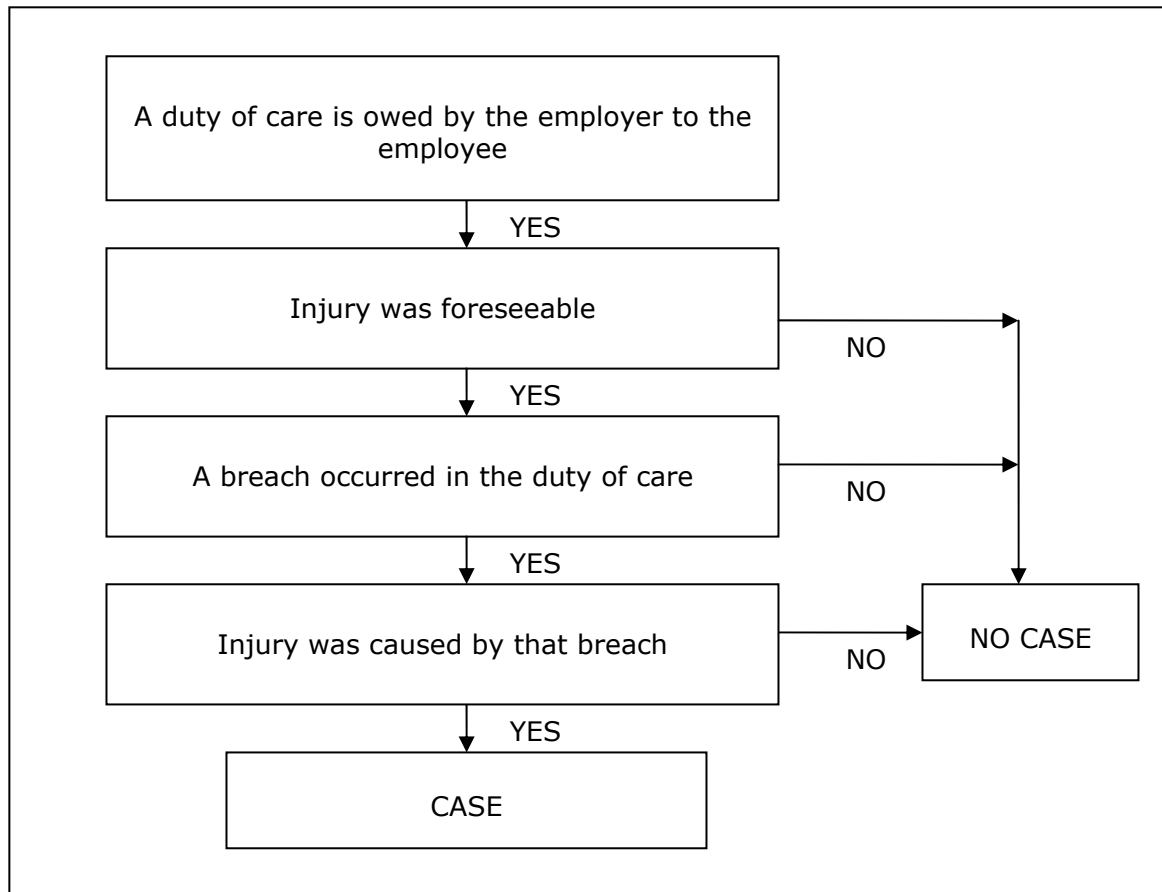


Figure 10: Flow chart representation of the personal injury case definition for work-related stress

5.5 The current investigation

The preceding sections in this chapter have demonstrated that the personal injury case definition for work-related stress has been subjected to academic scrutiny, but that critique has largely originated from a legal perspective (e.g., Buchan, 2001, 2007). In this way, the psychological dimension of this psycho-

legal case definition has been neglected. Furthermore, rather than offering a holistic examination of the case definition, previous investigations have tended to target specific elements. In addition, the study described in chapter 3 revealed that although stakeholders use the personal injury case definition as a key reference point in their activities on work-related stress, many subject-matter experts noted its shortcomings and called for its reform. It was noted that reform might enhance consistency between this case definition and that developed for large-scale survey application. Together, these factors indicate the imperative for a comprehensive examination of the structure, interpretation and application of the personal injury case definition for work-related stress that takes into account the perspectives of a range of vested interest groups with a view to the generation of recommendations for its development.

The current study examines problematic aspects of the structure, interpretation and application of the case definition through a content analysis of court judgments from personal injury claims for work-related stress. The results provide a foundation upon which to (i) make recommendations for the development of guidance for clarification of the structure and application of the case definition, (ii) make recommendations on reform of the case definition, and (iii) consider the role of occupational health psychology in these activities that might serve to clarify and enhance the degree of consistency achievable between the personal injury and survey-based case definition.

5.6 Methodology

5.6.1 Identification of data sources

To allow for a comprehensive examination of the personal injury case definition for work-related stress, a source of evidence was required that exposed the case definition to scrutiny from a variety of perspectives including those of

professional law makers as well as vested interest parties such as employees, employers and their representatives. Court judgments from personal injury claims for work-related stress were deemed to offer one such source of evidence since these provide valuable insight into debates among stakeholders concerning the structure, interpretation and application of the case definition.

Judgments were considered as a source of evidence where specific inclusion and exclusion criteria were met. A claim was included where:

- an English or Welsh court had passed judgment for injury explicitly arising out of work-related stress
- judgment had been passed in the period 2002-2007 (*Hatton* to *Daw*)

A claim was excluded where it:

- was heard in a court outside of England and Wales
- involved post-traumatic stress disorder
- involved bullying
- was settled out of court

Post-traumatic stress disorder and bullying cases are excluded on the grounds that although there is some obvious overlap with work-related stress in terms of nature, causes and consequences, fundamental differences can be identified that have implications for how the courts deal with claims associated with these phenomena. Unlike psychological illnesses typically associated with work-related stress in personal injury claims (usually anxiety or depression), post-traumatic stress disorder may arise following a single acute traumatic exposure rather

than repeated exposure to what might be considered chronic low-level hazardous psychosocial elements. This raises a unique set of questions for the courts in respect of the establishment of the foreseeability of illness, as is often evident in the claims of police officers who have witnessed traumatic events in the line of duty. Furthermore, internationally recognised diagnostic criteria exist for the psychiatric evaluation of post-traumatic stress disorder, in the form of the ICD-10 (World Health Organization, 1992) and DSM-IV (American Psychiatric Association, 1994) nosologies, which can serve to simplify the claimant's task in demonstrating the manifestation of a recognised psychiatric disorder. In contrast, work-related stress does not manifest in terms of a single named psychiatric disorder across individuals. Indeed, opinions differ on the question of which illnesses might be associated with work-related stress; it is quite possible that all human systems may be susceptible, be they psychological or physical. The failure of work-related stress to manifest as an illness in a predictable and consistent manner distinguishes personal injury claims in this area from post-traumatic stress disorder cases. Bullying cases are excluded on the grounds that the courts have traditionally dealt with these in isolation from work-related stress claims and have not drawn heavily from legal precedent in work-related stress claims when arriving at judgments. As a result, the majority or legal and psychological literature on work-related stress in the context of personal injury litigation has not given in-depth consideration to bullying claims. In that regard the approach adopted here follows precedent.

Hatton, and the set of practical propositions set out by the Court of Appeal in that case, has provided the main source of guidance on personal injury claims for work-related stress since 2002 (Buchan, 2007). Before that time, the operation of work-related stress claims had existed largely unchallenged since

the first claim of its type, *Petch*, in 1993. Debate about the personal injury case definition as it applies to work-related stress has largely focused on the post-*Hatton* period as a result of the courts' attempts to interpret and apply the practical propositions in subsequent cases. Thus, only post-*Hatton* cases were considered as data sources in the current study.

Judgments were identified through interrogation of online legal databases including those of the British and Irish Legal Information Institute (BAILII) and Lawtel using keyword search terms. The twenty eight claims that met inclusion criteria are indicated in Table 4.

Year	Title
2007	<i>Daw v Intel Incorporation UK Limited</i>
2006	<i>Hiles v South Gloucestershire NHS Primary Care Trust</i>
	<i>Pakenham-Walsh v Connell Residential (Private Unlimited Company) and ANR</i>
	<i>Sayers v Cambridgeshire County Council</i>
2005	<i>Best v Staffordshire University</i>
	<i>Brooks v North Yorkshire Moors Railway</i>
	<i>Green v Grimsby and Scunthorpe Newspapers Ltd</i>
	<i>Harding v The Pub Estate Company Ltd</i>
	<i>Hartman v South Essex Mental Health and Community Care NHS Trust</i>
	<i>Hone v Six Continents Retail Ltd</i>
	<i>Melville v The Home Office</i>
	<i>Moore v Welwyn Components Ltd</i>

	<i>Vahida v Fairstead House School Trust Ltd</i>
	<i>Wheeldon v HSBC Bank Ltd</i>
2004	<i>Barber v Somerset County Council</i>
	<i>Bonsor v RJB Mining (U.K) Ltd</i>
	<i>Hyam v Havering NHS Primary Care Trust</i>
	<i>Martindale v Oxfordshire County Council</i>
2003	<i>Barlow v Borough of Broxbourne</i>
	<i>Bonser v UK Coal Mining Ltd</i>
	<i>Croft v Broadstairs and St Peter's Town Council</i>
	<i>Foumeny v University of Leeds</i>
	<i>Pratley v Surrey County Council</i>
2002	<i>Bishop v Baker Refractories (Hatton conjoined case)</i>
	<i>Hatton v Sutherland (February)</i>
	<i>Jones v Sandwell Metropolitan Borough (Hatton conjoined case)</i>
	<i>Sparks v HSBC PLC (December)</i>
	<i>Young v Post Office (April)</i>

Table 4. Personal injury claims for work-related stress in England and Wales on which judgment was passed (2002-2007)

5.6.2 Content analysis

Judgments in personal injury claims for work-related stress vary in length from less than a dozen pages to, in some cases, more than one hundred. Page length is in large part determined by the number of hurdles that a claim successfully surmounts and which the judge casts judgment upon. For example, the judgment in a claim that fails at the second of the case definition elements,

foreseeability, is likely to be considerably shorter than that in a claim that proceeds through to tests of breach and causation. Judgments tend to be structured in a consistent fashion and contain the following elements:

- summary of the case and its progress through the court system
- summary of the grounds on which the claim is brought
- analysis of the claim in respect of each case definition element, including the opinions of council for the defendant and council for the claimant as well as that of the judge
- final verdict
- financial award

The court judgments were examined using a content analysis methodology. Within the organisational sciences, content analysis has emerged as a popular method for the analysis of text-based material (Kabanoff, 1997; Patton & Johns, 2007). In this context, content analysis is defined as “any technique for... making inferences by systematically and objectively identifying specified characteristics within texts (Kabanoff, 1997, p. 507). The emphasis within Kabanoff’s definition on *any technique* “indicates that content analysis should be considered a series of techniques as opposed to a clear-cut, rule-bound methodology” (Patton & John’s (2007, p. 1589), a point reinforced by Weber (1990) who noted that there is no one single way of doing a content analysis: the approach will be determined by the research question.

Data extraction

In view of the need to apply an approach to content analysis that is appropriate to the research question, a set of principles were devised to guide the data

extraction process. Problematic aspects of the case definition were defined as those where the judgment revealed any one of the following:

- disagreement between parties (claimant counsel / defendant counsel / expert witness / judge)
- disagreement between different courts
- explicit reference by the judge to an aspect of the case definition as being problematic
- contrasting opinion within the judgment on how the courts had dealt with a previous personal injury claim for work-related stress

Data coding and organisation

Each full-text judgment was retrieved from the Lawtel electronic database and initially read in its entirety for purposes of familiarisation. To adequately review the case definition a guiding framework was required that was capable of providing structure and logical coherence to the coding exercise. A taxonomy of issues on which debate has centred in the courts as well as in the legal literature was used for this purpose (Buchan, 2001). The taxonomy identified three categories of debate, namely: (i) general issues of foreseeability and breach, (ii) claimant-specific issues of foreseeability and breach, and (iii) causation. The taxonomy is set out in full in Appendix IV. Each judgment was manually scrutinised for evidence of problematic aspects of the case definition (as defined in the terms described above) associated with each of these three areas of debate.

5.7 Results

Results are presented in accordance with Buchan's (2001) framework. Thus, the most problematic areas of the case definition are presented in turn: issues of foreseeability, breach and causality.

5.7.1 Issues of foreseeability

The first element of the case definition on which debate has centred is the foreseeability principle. The establishment of foreseeability of injury is the single most challenging obstacle to face a claimant in personal injury litigation for work-related stress and the hurdle at which many claims fail (Earnshaw & Cooper, 2001; Jamdar & Byford, 2003). The 'neat' scenario by which foreseeability may be established, as exemplified in *Walker*, is a rare thing (Cooksley, 2005). That scenario involves four steps: (i) the employee suffers an episode of mental breakdown⁵, (ii) the employer fails to take reasonable steps to prevent a recurrence of injury, (iii) the employee suffers a recurrence of the mental breakdown, and (iv) confounding factors or events outside of work are absent which might have prevented the second breakdown from being attributed to the employer's failure to take reasonable steps to alleviate the risk of injury once he was aware or 'put on notice' of the employee's increased risk of mental breakdown.

Courtroom debate has focused on several aspects of foreseeability as it applies in work-related stress claims. Questions have been raised concerning (i) the

⁵ The term 'mental breakdown' is used here. Although not the preferred term to refer to psychological problems in the occupational health psychology literature it is the typically applied term in the language of personal injury law.

characteristics of work required of the claimant that might give rise to foreseeability and, (ii) signs from the claimant that might indicate to the employer the presence of an actual or impending injury. Issues surrounding both questions are presented below.

Did the type of work, or the actual work, the claimant was required to do give rise to a foreseeable risk of psychiatric injury?

In the assessment of foreseeability of risk of harm to the health of an employee, an employer is entitled to consider the nature and extent of the work done. *Hatton* emphasised the utility of such an examination in the fifth practical proposition:

(5) "Factors likely to be relevant in answering the threshold question include: a) the nature and extent of the work done by the employee. Is the workload much more than is normal for the particular job? Is the work particularly intellectually or emotionally demanding for this employee? Are demands being made of this employee unreasonable when compared with the demands made of others in the same or comparable jobs? Are there signs that others doing this job are suffering harmful levels of stress? Is there an abnormal level of sickness or absenteeism in the same job or the same department?"

In respect of this practical proposition, following *Hatton*, the courts demonstrated inconsistency of approach when considering the health of a claimant's co-workers in the establishment of foreseeability. This could be seen, for example, in *Martindale v Oxfordshire County Council* [2004] in which the

judge chose not to consider the health of other employees. Alerted by Andrew Buchan QC, acting on behalf of the claimant, that *"in relation to the Hatton criteria, the illnesses of other employees is a relevant consideration..."* and that accordingly the failure to call other witnesses could be *"perhaps a matter for criticism"*, the judge merely noted that Mr Buchan *"put it very charmingly"* and that the suggestion in *Hatton* that the health of a claimant's co-workers ought to be considered might be relevant *"in some cases"* (p. 54). The judge chose not to discuss the issue further and at that point closed the case.

The issue arose again in *Hartman v South East Essex Mental Health and Community Care NHS Trust* [2005]. At first instance the judge considered the fact that four members of staff had left the organisation owing to stress in the following terms: *"One is bound to say along with Lady Bracknell that to lose one member of staff is perhaps misfortune but to lose three or possibly four is carelessness"* (para. 49). At appeal, the trial judge's paraphrasing of Oscar Wilde was strongly criticised by Scott Baker LJ not only for the inappropriate use of literary references in court but, more importantly, on the grounds that it had led the judge not to consider whether the fact that other members of staff had experienced psychiatric injury was reasonable evidence of the foreseeability of the claimant's injury (para. 42).

Together, the evidence from *Martindale* and *Hartman* demonstrates the uncertainty of the courts in the interpretation and application of the *Hatton* guidance concerning when and how the health of other employees might be considered in the establishment of foreseeability.

Did the claimant show signs or give any indication of his/her actual or impending psychiatric condition which ought to have been known by the defendants?

Results are presented here concerning debates on (i) the degree to which responsibility lies with an employee to alert his employer to signs of harm, (ii) the clarity of signs of harm required from an employee, (iii) signs of impending harm in general practitioner evidence, (iv) the failure of employees to complain owing to ignorance of stress-related problems, (v) the reluctance of employees to complain owing to fear of jeopardising career development opportunities, and (vi) the role of psychosocial risk assessment.

Employee responsibility for alerting an employer to signs of harm

Hatton provided guidance in respect of the signs from an employee that a court might consider sufficient to alert an employer to actual or impending harm to that employee. The fifth of the practical propositions suggested that:

(5) "Factors likely to be relevant in answering the threshold question include:...b) signs from the employee of impending harm to health. Has he a particular problem or vulnerability? Has he already suffered from illness attributable to stress at work? Have there recently been frequent or prolonged absences which are uncharacteristic of him? Is there reason to think that these are attributable to stress at work, for example because of complaints or warnings from him or others?"

The sixth practical proposition developed this notion by asserting that responsibility to make an employer aware of any impending or actual stress-related condition sits with an employee:

(6) "The employer is generally entitled to take what he is told by his employee at face value, unless he has good reason to think to the contrary. He does not generally have to make searching enquiries of the employee or seek permission to make further enquiries of his medical advisers."

Two years after *Hatton*, *Barber* provided contrasting guidance in respect of responsibility for bringing to an employer's attention evidence of impending or actual signs of harm. Whereas the Court of Appeal in *Hatton* had suggested that the onus should lie with the employee, *Barber* appeared to switch the emphasis. The House of Lords (i) accepted that the practical propositions offered useful practical guidance but observed that they do not possess statutory force, (ii) asserted that each case must be heard upon its facts, and (iii) held that the statement of Swanwick J in *Stokes v Guest, Keen and Nettlefold (Bolts and Nuts) Ltd* [1968], which emphasised the duty on an employer to be proactive in the identification of risk, remained the best available statement on principle (para. 65).

Consistent with the House of Lords judgment in *Barber*, in *Daw v Intel Incorporation UK Ltd* [2007] the trial judge chastised the employer for excessive reliance on the sixth of the *Hatton* practical propositions that had led the employer to (i) fail to read carefully a letter in which the claimant set out her problems in detail and (ii) fail to ask questions on those aspects of the letter

that required clarification. The judge held that *"It does not seem to me the Court of Appeal in Hatton had a situation such as this in mind when it spoke of probing"* (para. 172). Further evidence of contrast with *Hatton* can be found in *Wheeldon v HSBC Bank Ltd* [2005] in which two courts agreed that the employer's attitude of 'you come to me' was inadequate and that *"A reasonable employer...would have taken Mrs Wheeldon aside and had a full discussion with her about what could be done"* (para. 27).

Clarity of signs of harm from an employee

Hatton provided guidance on the degree of clarity required of indications of impending or actual harm to put an employer on notice of foreseeable risk to health. The seventh practical proposition stated:

(7) "To trigger a duty to take steps, the indications of impending harm to health arising from stress at work must be plain enough for any reasonable employer to realise that he should do something about it."

The practical proposition raised the question of what might constitute 'plain enough' signs of harm from an employee. Following *Hatton*, the challenge in establishing whether signs from an employee were 'plain enough' was highlighted in a number of cases.

In *Bosner v UK Coal Mining Ltd (formerly RJB Mining (UK) Ltd)* [2003], the Court of Appeal held that the signs of stress in Mrs Bosnor (crying in meetings and complaints of exhaustion) were insufficient for the trial judge to have held that

"...if this [her workload] continues she will crack up" (para. 33). The Court of Appeal went on to state:

"To the knowledge of her employer she [the claimant] may have become vulnerable to the stress of over-work but not of psychiatric breakdown" (para. 27) and "It is not enough for employers to have foreseen stress; it must be foreseen that illness would follow" (para. 30).

In this way, *Bosnor* demonstrated the high threshold set by *Hatton* in terms of what is required to put an employer on notice of impending risk to psychiatric health as opposed to less specific (and non-compensable) manifestations of stress-related ill health.

The requirement for overt and direct employee complaints was reiterated in *Harding v The Pub Estate Company* [2005] in which the Court of Appeal held that the majority of the claimant's ten complaints made over an eight month period concerned *"environmental factors namely related to the clientele and neighbourhood [of the pub managed by Mr Harding] rather than impact on the respondent's health"* (para. 22). The court held that the employer had no control over aspects of the work environment that included clientele behaviour and, as such, could have done little to reduce these problems.

In the same way, the judge in *Daw v Intel Incorporation UK Limited* [2006] held that the fourteen (or more) complaints made by the claimant about the amount of work she had to do and the problems that arose in her work were not sufficient to put the employer on notice of impending psychiatric harm since they came from someone who appeared able to do the job.

Other cases have similarly demonstrated the requirement for an explicit and specific complaint of impending harm to health arising out of work-related stress (e.g., *Croft v Broadstairs and St Peter's Town Council* [2003]; *Pakenham-Walsh v Connell Residential (Private Limited Company) and ANR* [2006]). Notable in this respect is *Sayers v Cambridgeshire County Council* [2006] in which the court accepted that on numerous occasions between 2000 and 2002 the claimant had become tearful and upset at work, while holding that each had been related to a particular incident such as a failure to obtain promotion or criticism from a superior, and was thus explicable on that basis.

Opinion on the need for specific and overt complaints from an employee is not, however, consistent across case law. Contrasting opinion can be found, for example, in *Barber*. In that case, the House of Lords noted that *Hatton* implied that signs from an employee must be overt and forceful. It was also noted, however, that such expectations might not be reasonable, particularly in view of the fact that the claimant was already suffering from depression at the time that complaints might have been expected and that previous complaints had triggered unsympathetic responses (para. 67).

Consistent with *Barber*, in *Hiles v South Gloucestershire NHS Primary Care Trust* [2006] the judge attached considerable importance to the claimant's single emotional display that included tears during a performance review in which she informed her employer of caseload difficulties. The judge held this was justified on the grounds that:

"...it is not normal behaviour for an ordinarily robust and hardworking employee to burst into tears as a result of discussing her workload with

management...I think this emotional display at an ordinary work interview was a sign not only that Mrs Hiles was under stress, but also, that the stress was in popular language beginning to get to her, and that if it continued or got worse, Mrs Hiles' well-being (i.e. her health) might be adversely affected" (para. 24).

Similarly, in *Hone v Six Continents Retail Ltd* [2005] the Court of Appeal expressed the opinion that although the claimant had not made direct complaints about impairment to his health arising out of his work, the employer's knowledge that he was working up to 90 hours per week should have been a sufficient or 'plain enough' sign that something was awry.

Signs of impending harm in general practitioner evidence

Presentation to a general practitioner for symptoms of stress associated with work may elicit important documentary evidence that might be used in court to demonstrate that an employer knew of a claimant's stress-related health problems. Some debate has centred on the weight that should be attached to general practitioner evidence in establishing foreseeability.

The issue was demonstrated in *Barber*. At trial, Mr Barber expressed surprise that upon his return to work after having been signed off work by his general practitioner for three weeks, no member of the school's management team enquired about his health. He was particularly surprised given that the sick notes issued by his general practitioner recorded that he was suffering from 'stress and depression'. The Court of Appeal appeared to disagree with the suggestion that the employer should have taken action upon receipt of the sick

notes issued by the claimant's general practitioner. Ultimately, when the case reached the House of Lords, Lord Walker held that doctor-certified absence for stress and depression should have been sufficient to trigger enquiries about his health from the senior management team (para. 67). In this way, the House of Lords highlighted the importance that ought to be attached to general-practitioner evidence in the establishment of foreseeability. Indeed, since that time, failure to make a complaint to a general practitioner has been shown to be fatal to the outcome of a claim (see *Pakenham-Walsh v Connell Residential (Private Limited Company)* and ANR [2006] para. 33).

Failure to complain owing to ignorance of stress-related problems

Despite the expectation set out in *Hatton* that employees should be held responsible for bringing stress-related problems to the attention of their employer, there is evidence in case law to suggest that some employees suffering from a stress-related illness attributable to work will lack insight into the nature of their mental health problems and will thus be unlikely to complain. Precisely this scenario played out in *Barber* in which the claimant testified:

"He [the GP] told me I was suffering from stress and depression. I recall being astounded. I was not surprised that the doctor said I was suffering from stress. I was perfectly aware that I was stressed and overworked. I was astounded that I had been diagnosed as suffering from depression" (para. 49).

Reluctance to complain

As above, despite the expectation set out in *Hatton* that employees should be held responsible for bringing stress-related problems to the attention of their employer, there is evidence in case law to suggest that some employees may seek to conceal impending or actual stress-related problems from an employer for a variety of reasons including personal or professional pride and the perceived risk of jeopardising career development opportunities. This may be particularly so in organisations where complaints might be interpreted as a sign of weakness. As much was overtly recognised in *Barber* in which Lord Walker observed:

“Senior employees – especially professionals such as teachers – will usually have quite strong inhibitions against complaining about overwork and stress, even if it is becoming a threat to their health. Personal and professional pride, loyalty to the head teacher and to colleagues, and the wish not to add to their problems and workload, may all influence a teacher not to complain but to soldier on in the hope that things will soon get a little better” (para. 64).

There is a growing body of case law to demonstrate the efforts of employees to conceal their stress-related health problems. In *Pratley v Surrey County Council* [2003] the claimant asked her general practitioner to make reference to neuroalgia rather than a stress-related illness on a sicknote owing to a desire to conceal *“...both the extent of the overtime she found it necessary to put in and also that her neuralgia could be related to stress at work”* (para. 5). In *Sayers v Cambridgeshire County Council* [2006] the claimant agreed on one occasion that

her general practitioner would indicate on a medical certificate that she was suffering from an upper respiratory tract infection and, on a second occasion, a chest infection. Interrogation of the doctor's notes from previous presentations showed reference to work-related stress but, as on subsequent occasions, no mention was made on the medical certificates produced for the employer. These cases did not involve judgment on the issue of purposeful concealment and thus the question of how the courts might deal with such a matter when it is central to the question of liability remains unclear.

Psychosocial risk assessment

Hatton placed the onus of responsibility upon employees to alert their employers to signs of impending or actual harm arising out of work-related stress. However, that requirement may be at odds with the statutory duty of employers to apply psychosocial risk assessment procedures under the European Framework Directive on Health and Safety at Work (Directive 89/391: European Commission, 1989). This Directive requires employers to develop a 'coherent overall prevention policy which covers technology, organisation of work, working conditions, [and] social relationships' (Article 6:2), to 'be in possession of an assessment of the risks to safety and health at work' and to 'decide on the protective measures to be taken' (Article 9:1). These principles have been transposed into English and Welsh law in the Management of Health and Safety at Work Regulations (1999).

Case law reveals a debate on employer obligations as they relate to psychosocial risk assessment. A number of claims have been heard by the courts in which the claimant has argued that (i) provision by the employer of an ongoing cycle of

psychosocial risk assessment might have prevented psychiatric injury and (ii) failure to apply such procedures placed the employer in breach of his statutory duty to assess for psychosocial risk.

The courts have struggled with the question of whether the obligation to risk assess as set out in the European Framework Directive is an absolute obligation that sets a higher standard of care than applied in the law of negligence and one that applies in claims for work-related stress. In *Sayers v Cambridgeshire County Council* [2006] it was noted that (albeit outwith the English and Welsh legal context) the Scottish Court of Session in *Cross v Highlands and Islands* [2001] had held that the European Framework Directive was not intended to cover work-related stress. However, in *Sayers* the claimant argued that although work-related stress was not mentioned explicitly in the text of the Directive and may not have been considered by those who drew up the legislation, it is necessary to interpret Community law in spirit rather than to the letter owing to the dynamic and expanding nature of the European Community. This stance was substantiated by reference to a case heard in the European Court of Justice (*Commission v Italy* [2001] (Case C-49/00 unreported judgment of 15 November 2001)) where it was held that “*the occupational risks which are to be evaluated by employers are not fixed once and for all, but are continually changing in relation, particularly, to the progressive development of working conditions and scientific research concerning such risks*” (para. 13).

The crux of the claimant’s argument in *Sayers* was that irrespective of national legislation, the claimant is entitled to rely on a provision set out in a European Directive. Ultimately, the judge held that the Framework Directive (i) does apply to psychiatric injury (as had previously been concluded in the work-related

stress case of *Martindale v Oxfordshire County Council* [2004]), (ii) sets out general 'principles and methods of approach which require more specific provisions' in national legislation for them to be put into practice. Thus the Directive does not impose a directly enforceable right on workers, and (iii) is not sufficiently precise to have direct effect. The judge pointed to ambiguity in phrases such as 'avoid risks' which require "further elaboration before they can confer rights and impose obligations" (para. 312).

5.7.2 Issues of breach

Once a court has considered foreseeability of injury, it must next consider whether an employer's actions upon gaining knowledge of imminent or actual risk of harm to an employee constituted a reasonable response. Should steps taken be considered inadequate, it may be asserted that a breach of duty of care has occurred. The operation of breach can be seen clearly in *Walker*. While absent from work during his first episode of mental illness, Mr Walker was informed by his employer that upon his return to work (in March 1987) he would receive assistance with his duties for so long as it was needed. In the event, support was withdrawn within a month of his return to work. Concomitantly his case load increased and by September 1987 he was suffering from stress-related anxiety. Following a further breakdown he was dismissed on grounds of permanent ill health in February 1988. The judge held that the employer had been put on notice of a foreseeable risk of injury as a result of the claimant's first mental breakdown and its failure to take reasonable steps to avoid exposing him to a health endangering workload upon his return to work constituted a breach in its duty of care.

Debate on breach has centred on questions of (i) when and in what way the employee provided signs of imminent harm, (ii) when and in what way the employee complained, (iii) what steps ought to have been taken, (iv) when steps should have been taken, and (v) what effect the steps might have had.

In deciding what steps were reasonable, when and in what form did the claimant show such signs?

The nature of signs of actual or impending harm that might be sufficient to place an employer on notice of risk were considered in detail in the preceding section on foreseeability and are not rehearsed here. It is sufficient to note that *Hatton* set out guidance in this respect which, rather than clarify the issues, has generated confusion and inconsistent application of the law.

In deciding what steps were reasonable, when and in what way did the claimant complain (if any)?

As above, issues of when and in what way a claimant complained were dealt with in the preceding section and are not rehearsed here.

In deciding what steps were reasonable, what steps should have reasonably have been taken?

Ascertaining the adequacy of steps taken by an employer is fraught with difficulty. Unlike many physical injuries for which there is established and empirically validated employer guidance, no such guidance is available in respect of psychological injuries. (the only such evidence referred to in court judgments considered here is the Health and Safety Executive's 2001

publication *Tackling work-related stress – a manager's guide to improving and maintaining employee health and well-being* (see, *Sayers v Cambridgeshire County Council* [2006])).

Debate in the courts has centred on three issues that are discussed below: (i) the size and scope of an employer's operation when considering what steps ought to be taken, (ii) guidance from healthcare professionals on steps that might be taken, and (iii) the role of confidential counselling services.

The size and scope of an employer's operation

Two of the *Hatton* practical propositions provided general guidance on reasonable steps that might be taken by an employer to mitigate the risk of psychiatric injury:

(8) *"The employer is only in breach of duty if he has failed to take the steps which are reasonable in the circumstances, bearing in mind the magnitude of the risk of harm occurring, the gravity of the harm which may occur, the costs and practicability of preventing it, and the justifications for running the risk."*

(9) *"The size and scope of the employer's operation, its resources and the demands it faces are relevant in deciding what is reasonable; these include the interests of other employees and the need to treat them fairly, for example, in any redistribution of duties."*

Following *Hatton*, the courts struggled to put these practical propositions into practice in a consistent fashion. This can be seen in respect of the role of an employer's financial resources in the determination of steps that might be considered adequate. In *Brooks v North Yorkshire Moors Railway* [2005], the employer operated a small seasonal railway that ran steam trains on a restricted stretch of line. In recognition of the limited scale of the operation, the judge held that there was little more that the employer could have done once alerted to the claimant's psychiatric problems other than offer a job-swap with another member of staff that included a drop in salary. In summing up, the judge noted *"The fact that not every stone was turned does not mean that the defendants are in breach of their duty"* (para. 85). At the other end of the scale, in *Daw v Intel Incorporation (UK) Limited* [2007] the court recognised the multi-national commercial status of the defendant employer and took that into account in determining what steps might reasonably have been taken. In relation to the claimant's excessive workload the judge observed that *"I have no doubt that a company with the resources of Intel could immediately have ameliorated the position as far as Mrs Daw was concerned"* (para. 175).

In contrast, the House of Lords in *Barber* emphasised an employer's responsibility to take reasonable steps irrespective of its economic status. Lord Walker insisted that even with scant resources the employer has a duty to act to reduce stress (para. 68). He further noted that relatively inexpensive interventions may well have been effective in that particular case: *"Even a small reduction in his duties, coupled with the feeling that the senior management team was on his side, might itself have made a real difference"* (para. 68). Although the majority judgment in *Barber* highlighted the obligation on an employer to take reasonable steps even in difficult budgetary circumstances, it

is noteworthy that Lord Scott, dissenting, argued that '*in under funded institutions providing vital social services there is often very little that the employers can do about stress problems*' (para 14). As such, *Barber*, like *Hatton*, left questions unanswered about the scale and nature of response that might reasonably be expected of an employer to avoid a breach of his duty of care in work-related stress cases.

A similar line to that of the majority in *Barber* was taken by the Court of Appeal in *Wheeldon v HSBC Bank Ltd* [2005]. The Court of Appeal held that the employer's failure to sit down with the claimant to discuss possible modifications to the psychosocial work environment constituted a breach of duty. *Wheeldon* suggested that at the very least the employer has a duty to consider psychosocial modifications.

Guidance from primary healthcare professionals

Case law demonstrates the paucity of authoritative, consistent and useful guidance from occupational health professionals and general practitioners on reasonable steps that an employer might take. This was illustrated in *Brooks v North Yorkshire Moors Railway* [2005] in which the court was presented with a letter from the claimant's general practitioner which offered the advice that "*With regards to what type of work he would be able to do, I think the key thing is that he does not feel stressed by it. It is difficult to say, with not knowing exactly what he does on a day to day basis...*" (para. 65). This statement betrays some of the impotence of the general practitioner to make useful recommendations with limited knowledge of the content and context of the claimant's work. The same could be seen in *Martindale v Oxfordshire County*

Council [2004]. The employer, a secondary school, sought advice from the Assistant Head Teachers Association which suggested no adjustments in its report, merely that *"If Nigel Martindale had a clearance note from his GP he should come back to work"* (p. 8). Further advice was sought from the council's occupational health service which recommended *"...he might like to return on a temporary part-time basis and this will have to be discussed"* (p. 8).

Confidential advice services

The eleventh of the *Hatton* practical propositions stated that *"An employer who offers a confidential advice service, with referral to appropriate counselling or treatment services, is unlikely to be found in breach of duty"*. In the wake of *Hatton*, the courts struggled in dealing with confidential advice services, more commonly known as employee assistance programmes, as a defence against liability for work-related stress (see, for example, *Best v Staffordshire University* [2005]).

Five years later, the Court of Appeal offered some clarification in *Daw v Intel Incorporation UK Limited* [2007] in its observation that *"The reference to counselling services in Hatton does not make such services a panacea by which employers can discharge their duty of care in all cases"* (para. 45). The Court of Appeal in *Daw* endorsed the statement of the trial judge that:

"Whether in any given case the counselling service provided will be enough to discharge the reasonable employer's duty of care must depend on the facts of the case. Mrs Daw sets out the limitations of the counselling service. She cannot reasonably be criticised for not using

it...A short-term counselling service could not have done anything to ameliorate that risk...it could not reduce her workload. The most it could have done is advise her to see her doctor" (para. 183).

Through these statements the Court of Appeal appeared to acknowledge the limitations of employee assistance programmes, their palliative nature and the fact that modifications to the psychosocial work environment usually constitute a superior approach to dealing with work-related stress.

In deciding what steps were reasonable, when should they have been taken?

A question exists on the timeframe in which reasonable adjustments should be made. The challenge inherent in this question can be seen in two cases. In *Pratley v Surrey County Council* [2003], the Court of Appeal was invited by the claimant's lawyer to consider that it was reasonable for the claimant to expect modifications promised just before she went on vacation to have been introduced immediately upon her return to work. The Court held that such an expectation was unreasonable in view of the magnitude of the risk of breakdown. The judge noted that *"When one is considering the risk of future harm, one is necessarily considering a risk which might eventuate the day after it became reasonably foreseeable, or the next week or the next month. The date is indeterminate. That gives rise to another question...when is it reasonable to require him to do it?"* (para. 49).

In *Green v Grimsby and Scunthorpe Newspapers Ltd* [2005] the Court of Appeal held that it was reasonable for the employer to have waited five days before

responding to being put on notice of foreseeable risk of injury in the claimant on the grounds that such a timeframe was required for a detailed consideration to be made of the best course of action. The issue of when steps should have been taken and the related issue concerning the period of time during which modifications to the work environment should be maintained, have together received less attention in the courts than they might deserve, perhaps owing to the fact that few claims have proceeded to the point at which breach has been discussed.

In deciding what steps were reasonable, what effect would they have had?

When considering steps that might be taken, an employer is entitled to take into account their potential effectiveness. Such was made clear in the tenth of the *Hatton* practical propositions which stated that *"An employer can only reasonably be expected to take steps which are likely to do some good: the court is likely to need expert evidence on this."*

At trial, claimants have been known to present a host of steps that, it is argued, the employer ought to have taken. However, the courts have struggled to pass judgment on whether any of those steps might have done some good. This could be seen in *Brookes v North Yorkshire Moors Railway* [2005] in which the judge stated:

"I bear in mind very much what the Court of Appeal clearly had in mind in the case of Hatton that it would be possible, almost inevitably after the event, to come up with a raft of issues which could perhaps have been

tried and undertaken. It is not known at this stage whether those procedures would in fact have done any good. It is very difficult to know without direct evidence as to whether or not such a course of action would really have made any difference.” (para. 84).

Brookes also established that an employer is entitled to ask the employee for suggestions on what steps might do some good while also recognising that an employee suffering from a psychological illness may not be able to generate suitable ideas (para. 86).

5.7.3 Issues of causation

Courtroom debate on causation has centred on two broad sets of questions. First, that of whether the claimant had experienced an identifiable psychiatric illness and, second, that of whether work caused or materially contributed to the development of the illness.

Has the claimant suffered from an identifiable psychiatric illness?

In an early psychiatric injury case, the judge held that *“The first hurdle which a plaintiff...must surmount is to establish that he is suffering not merely from grief, distress or any other normal emotion but a positive psychiatric illness”* (*McLoughlin v O'Brian* [1983] para. 431). The courts have adopted the same approach in personal injury claims for work-related stress. As such, it is usually necessary for a claimant to have obtained a diagnosis of a recognised psychiatric injury. This requirement has triggered much debate in court. Questions have centred on (i) the nature and measurement of psychiatric

illness, (ii) the preclusion of claims that involve non-psychiatric manifestations of harm, and (iii) the 'double-knock' principle.

The nature and measurement of psychiatric illness

On the basis of the "*considerable degree of international agreement on the classification of mental disorders and their diagnostic criteria*" (Hale LJ in *Hatton*, para. 5), the courts have consistently held that clinical diagnosis in personal injury claims for work-related stress should be made in accordance with the DSM-IV (APA 1994) or ICD-10 (WHO, 1992) nosological systems.

However, the lack of consistency that is often evident between the diagnosis of the clinician secured by the claimant and that of the medical expert for the defence raises questions in respect of the adequacy of these systems for use in work-related stress litigation.

Case law offers examples of conflictual medical reports. For example, in *Hiles v South Gloucestershire NHS Primary Care Trust* [2006], the psychiatrist for the defendant employer argued that the claimant's depression was exaggerated, that her suicidal thoughts were 'made up' and that she would have been able to return to work much earlier following a period of absence if her father had not been ill at that time. The psychiatrist for the claimant disagreed on all points.

Similarly, in *Daw v Intel Incorporation (UK) Limited* [2007], medical experts could not agree on the question of whether the claimant's mental health would have deteriorated had action been taken by the employer to reduce psychosocial hazard exposures at a crucial point in time.

Yet further example can be found in *Wheeldon v HSBC Bank Ltd* [2005] in which the claimant's psychiatrist argued that Mrs Wheeldon had *"a vulnerable personality and that due to her work stress she suffered a mild to moderate depressive attack associated with panic attacks"* (para. 81). This statement was in stark contrast to that of the psychiatrist for the defence who argued that the claimant's problems were *"no more than part of a long standing somatisation disorder and had nothing to do with any problems at work"* (para. 81). Ultimately, the trial judge preferred the evidence of the claimant's psychiatrist and suggested that the employer's psychiatrist had *"...tried to make the history fit the theory rather than looking at the history and then deciding on the correct diagnosis"* (cf. para. 82, Court of Appeal judgment). Further example of conflictual psychiatric reports can be seen in *Best v Staffordshire University* [2005].

It is possible that some of the inconsistency in diagnosis might be attributable to the willingness of psychiatrists to provide a diagnosis consistent with the desires of the counsel of employ. Such a view was expressed in *Pakenham-Walsh v Connell Residential (Private Limited Company) and ANR* [2006], in which the Court of Appeal held that *"The doctors' opinions were significantly influenced by their own view of the appellant's evidence"* (para. 52).

Non-psychiatric manifestations of harm

The courts' traditional preference for evidence of psychiatric disorder in work-related stress claims has, in practice, had the effect of precluding claims that involve physical manifestations of harm. However, *Hatton* made clear that in

theory there is nothing to preclude a claim for work-related stress that involves physical injury. The Court of Appeal stated that:

“stress...is a psychological phenomenon but it can lead to physical or mental ill health or both. When considering the issues raised by these four cases, in which the claimants all suffered psychiatric illnesses, it may therefore be important to bear in mind that the same issues might arise had they instead suffered some stress-related physical disorder, such as ulcers, heart disease or hypertension” (para. 10).

The point was reiterated by the Court of Appeal in *Harding v The Pub Estate Company Ltd* [2005]. In the judgment, Scott Baker LJ observed that:

“Most of these [stress at work] cases have been concerned with psychiatric injury. But to my mind it makes no difference to the issue of liability that the injury in fact suffered by the respondent in the present case was a heart attack rather than a psychiatric breakdown” (para 4).

Nevertheless, case law involving physical manifestations of harm remains virtually non-existent.

The ‘double knock’ principle

The courts have traditionally required evidence of two episodes of injury, the latter being a recurrence of the former. Usually, the first is not considered foreseeable to the employer; it is the second, in the absence of reasonable steps to alleviate the risk of a repeat episode of injury, which has been found

foreseeable. However, there are rare examples of successful claims involving a single episode of psychiatric injury arising out of work-related stress.

One such case is that of *Melville v The Home Office* [2005]. Mr Melville was a prison health care worker whose responsibilities involved the recovery of prisoner's bodies following suicide. Following one such body recovery (his eighth in seventeen years) he developed a stress-related illness and shortly thereafter retired on grounds of ill-health. The claimant had no prior experience of psychiatric injury, nor had he given any indication of impending injury. However, the court was asked to consider whether the provision of Home Office guidance for dealing with traumatic incidents in prison, which acknowledged possible health effects and support requirements, was tantamount to an acknowledgement that the claimant's psychiatric injury was foreseeable. At first instance it was agreed that this was the case and Mr Melville argued his case on the basis that it was the implementation of that guidance which was insufficient. The claim was found in favour of the claimant and a Home Office appeal was subsequently rejected. The case of *Melville* demonstrates that there is a degree of inconsistency in application of the double-knock principle in work-related stress claims.

Was [the] illness caused or materially contributed to by his or her work with the defendant?

The case definition requires a claimant to demonstrate that work caused or materially contributed to the development of an injury. Three issues of debate are considered here: (i) the co-occurrence of breach and psychiatric injury, (ii) alternative plausible causes of injury, and (iii) apportionment of cause.

The co-occurrence of breach and psychiatric injury

In addition to a claimant being required to demonstrate the presence of a recognised psychiatric disorder at the time of the breach in his employer's duty of care, he must also establish that the breach materially contributed to the injury. The demonstration of material contribution can be difficult, as exemplified in *Sparks v HSBC PLC* [2002]. In that case, the trial judge and the Court of Appeal held that the employer had breached his duty of care to the claimant by giving him extra duties to 'hold the fort' while his supervisor was on holiday, despite the employer's knowledge that the claimant had a vulnerability to psychiatric illness and required support in the workplace. Although breach was acknowledged, the courts concurred that it was not clear that the specific breach had caused or materially contributed to psychiatric injury for it could not be demonstrated that psychiatric damage had been suffered in the week during which breach occurred.

Alternative plausible causes

The establishment of causation is further complicated where there exists plausible alternative causes of injury. For example, where there has been a domestic problem or history of mental illness the chance of a successful claim is diminished. This was seen in *Pakenham-Walsh v Connell Residential (Private Limited Company) and ANR* [2006] in which the judge held that the claimant's personal problems that included her divorce, her estranged daughter's cancer diagnosis, her own bankruptcy and her daughters affair with her husband (the daughter's step-father) provided an alternative explanation to breach of duty for the psychiatric injury that occurred.

However, case law suggests that evidence of previous mental health problems does not necessarily preclude litigation. The case of *Daw v Intel Incorporation (UK) Limited* [2007] showed that despite a previous history of two episodes of post-natal depression of which the employer was aware plus three references in her work appraisal records to mood swings, the employee's claim was successful, although the size of the award was reduced by the Court of Appeal in recognition of the possibility of mental illness having arisen irrespective of the employer's breach of duty.

Apportionment

In some cases, the courts have been required to engage with the difficult task of apportionment of responsibility for psychiatric injury across a set of possible causes. Further, in these cases the courts must apportion damages accordingly. For example, in *Moore v Welwyn Components Ltd* [2005] the employer argued that damages should have been apportioned to reflect the fact that the employee's vulnerable emotional state was in part non-work related and might have caused him to lose earnings in the remaining years of his employable life.

Similarly, in a number of claims the courts have had to decide whether to reduce the size of a financial award to take into account impending retirement in older claimants. For example, in *Barber* the claimant was 59 years of age by the time the claim reached the House of Lords. In recognition of the fact that the claimant would have retired shortly afterwards regardless of any claim, the House of Lords reduced the award from £101,000 to £70,000. Previously when considering damages in the same case, the Court of Appeal had held the line that, on the basis of the evidence presented in court, Mr Barber was unlikely to

remain in teaching until statutory retirement age and that this should be reflected in damages awarded.

5.8 Discussion

The study presented in this chapter sought to identify issues of debate, as evidenced in court judgments, concerning the structure, interpretation and application of the case definition used in personal injury claims for work-related stress in England and Wales. The analysis was conducted in response to an imperative identified in the study described in chapter 3 for clarification and reform of the case definition that might facilitate future activities targeted at the enhancement of consistency between this case definition and that developed for large-scale survey application. The analysis highlighted a host of issues that related to three components of the case definition: foreseeability, breach and causation.

The results provide a foundation upon which to (i) make recommendations for the development of guidance for clarification of the structure, interpretation and application of the case definition, (ii) make recommendations on reform of the case definition, and (ii) consider the role of occupational health psychology in these activities. Together, these endeavours may serve to clarify or enhance consistency between this case definition and that developed in chapter 3 for use in large-scale, nationally-representative workforce surveys.

5.8.1 Foreseeability: Discussion and recommendations

Debate on foreseeability has focused on challenges in gathering documentary evidence of actual or impending harm. Specifically, debate has centred on

questions concerning (i) characteristics of work required of the claimant and (ii) signs from the claimant that might indicate an actual or impending injury. Taken together, the challenges inherent in these issues have led the courts to move forward slowly and cautiously in defining foreseeability in work-related stress claims (Jamdar & Byford, 2003).

In relation to the first of these points, the judgments revealed inconsistency in the approach of the courts towards the application of the fifth of the *Hatton* practical propositions. This was especially so in respect of the relevance of the health of co-workers to the establishment of foreseeability. The question of the degree to which the health of co-workers ought to be considered important by a court is pertinent, not least, due to the financial implications of gathering witness statements and the possible reluctance among employees to testify (Earnshaw & Morrison, 2001).

In relation to the latter point, judgments revealed debate on the division of responsibility between an employer and employee in respect of the management of work-related stress. Debate on this question has been triggered in large part by the *Hatton* practical propositions which have been widely interpreted as containing three core and related elements, namely (i) the individual is in charge of his own mental health, (ii) the individual can gauge whether the job is doing him any harm, and (iii) the individual can then do something about it (Allen, 2004). As one commentator described it, in *Hatton*, "the Court of Appeal shifted the burden onto an employee to be in charge of their own mental wellbeing and to take action to deal with stress in the workplace by requiring the employee to complain and bring the problem to their employer's attention" (McLeod, 2005, p. 1).

Some post-*Hatton* claims have appeared to shift the emphasis of responsibility towards the employer. In *Barber*, the House of Lords asserted that employers ought to take the initiative in making enquiries in respect of employee health and stress-related problems (Buchan, 2007). Indeed, *Barber* was seen by some to swing the pendulum in favour of the employee to the extent that the judgment raised further questions about the nature and scope of an employer's enlarged pastoral role. In this vein, Patten (2004), for example, questioned whether the judgment might mean that events such as an employee arriving for work looking dishevelled or calling in sick with a migraine might henceforth be regarded by the courts as sufficient to trigger a stress-related enquiry from the employer.

So extensive are the debates surrounding issues of foreseeability, it has been suggested that the courts' attempts to clarify matters have only served to increase the likelihood of the foreseeability criterion being inconsistently applied (Russell, 2004). As a result, many future claims are likely to focus on this issue (Jamdar & Byford, 2003). On the basis of the results from the current study, a series of recommendations can be identified, informed by the occupational health psychology literature, for (i) clarification and reform of the structure and application of the foreseeability element of the case definition and (ii) the development of guidance for stakeholders on the interpretation and application of the foreseeability element of the case definition.

Recommendation 1: *Development of guidance for employers on psychosocial risk assessment procedures and their relationship to the establishment of foreseeability*

Psychosocial risk assessment procedures allow for the risk of harm arising out of the design, management and organisation of work to be established at an early stage (Cox, 1993; Cox et al., 2000; Cox et al., 2002). In this way, they are of importance in personal injury litigation for work-related stress since they may generate evidence of value in the establishment of foreseeability.

Employers have a statutory duty to apply such procedures under the European Framework Directive on Health and Safety at Work (Directive 89/391: European Commission, 1989) and its transposition in English and Welsh law, the Management of Health and Safety at Work Regulations (1999). The approach also finds support in the Health and Safety Executive's Management Standards for Work-Related Stress (Cousins et al., 2004; Mackay et al., 2004). Despite the statutory nature of this duty, psychosocial risk assessment has been largely ignored across Europe in the activities of employers towards meeting their legislative requirements (European Commission, 2004). Consistent with this finding, one survey of personal injury solicitors found that in work-related stress claims under investigation or for which proceedings had begun, not one defendant employer had conducted a psychosocial risk assessment (Earnshaw & Morrison, 2001).

These factors point towards the imperative for the development and dissemination of guidance for employers on the application of psychosocial risk management procedures as they relate to the personal injury case definition for work-related stress.

Authoritative guidance on the application of psychosocial risk assessment procedures is freely available from sources such as the Health and Safety Executive. However, such guidance generally fails to relate risk assessment procedures to the case definition used in personal injury litigation for work-related stress. In this way, it falls short of providing employers with a procedure for considering how risk assessment results might contribute to the establishment of foreseeability. Such guidance would be of use not only to employers but also to employees, occupational health professionals, trades unions, insurers and legal professionals in judging the merits of potential claims.

Impetus for the development of guidance on the relationship between psychosocial risk assessment procedures and the personal injury case definition may be found in two additional sources. First, the Health and Safety Executive's stated intention to step-up enforcement activities, including criminal prosecution, in respect of work-related stress (Health and Safety Executive, 2008). Such activities would in all likelihood trigger an increase in the number of personal injury claims initiated. Second, the 2003 amendment to the Management of Health and Safety at Work Regulations (1999) that introduced a civil right of action by an employee against his employer for breach of statute (that includes a failure to risk assess). As a result of this amendment it is possible that a growing number of personal injury claims for work-related stress will reach the courts in which a breach of the Regulations is argued.

The interplay between personal injury litigation for work-related stress and psychosocial risk assessment procedures may have been neglected in the development of guidance on the latter by, among other factors, the stance of the courts on psychosocial risk assessment. Generally, the courts have

neglected the role of psychosocial risk assessment (and its underpinning statutory obligations) in the establishment of foreseeability (Buchan, 2002). Some judges have expressed the opinion that psychosocial risk assessment might be an ineffectual tool for the prevention of a stress-related illness, preferring instead to place stock in the efficacy of tertiary, palliative occupational health provision (see, for example, *Sayers v Cambridgeshire County Council* [2006], paras 218-219). In contrast, some judges, such as that in *Hatton*, have acknowledged the value of psychosocial risk assessment procedures and have suggested that “*there is an argument that stress is so prevalent in some employments...that all employers should have in place systems to detect it and prevent its developing into actual harm*” (para. 16).

Those judgments that have advocated psychosocial risk assessment procedures have nevertheless not avoided criticism from legal commentators. Judgments such as that in *Barber* have been criticised on the grounds that reference to psychosocial risk assessment procedures has been so brief as to imply that the courts have little interest in ascertaining whether an employee is at risk before serious injury occurs (Allen, 2004). Specifically in respect of *Barber*, others have gone further in their criticism of the House of Lords’ failure to grasp a historic opportunity to redefine the law in the context of the contemporary world of work (Zindani & Korn, 2004).

Recommendation 2: *Guidance on the nature and extent of signs from the employee necessary to put an employer on notice of foreseeable risk*

The analysis of court judgments revealed inconsistency and confusion surrounding the nature and extent of signs of actual or impending harm that

might be required from an employee to place an employer on notice of foreseeable risk. In view of the challenge associated with the identification of signs that might be indicative of work-related stress, stakeholders might benefit from guidance on the nature of associated psychological, social and behavioural signs. Such guidance would facilitate the early identification of stress-related problems that in turn would permit the implementation of tailored interventions. It would also assist decision-making on whether signs might be considered sufficient to trigger an employer's duty to take reasonable steps to avert injury. Guidance might be generated through a systematic review of the occupational health psychology and related literatures.

Recommendation 3: Guidance for general practitioners on the use of sick notes for work-related stress

The role of the general practitioner in the provision of evidence that may be used to establish foreseeability has evolved unchecked. Problems centre on two issues associated with the sick note. First, the sheer number of sicknotes for work-related stress issued by general practitioners and submitted to employers might diminish their value as indicators of ill-health (Jamdar & Byford, 2003). Second, evidence from court judgments suggests that claims often involve sick notes that imprecisely refer to 'stress', 'too tired for work' or other ambiguous descriptions. These fail to assist the employer in making a decision on what steps, if any, might reasonably be taken to avoid harm to the employee (ibid). Furthermore, they are inconsistent with the requirement of the personal injury case definition for evidence of a recognised psychiatric disorder.

The role of the general practitioner in personal injury claims for work-related stress may be further complicated where a patient, who later becomes a claimant, requests that a sick note should make no reference to work-related stress. Such was the case in *McNallen v Commerzbank* [2004] in which the claimant requested that a medical certificate made reference to a viral illness rather than depression (the case was settled out of court and therefore failed to meet inclusion criteria for the analysis presented in this chapter). The results of the current investigation support the findings of surveys of human resource professionals (Right CoreCare, reported in *The Guardian*, 10th January, 2005) and personal injury solicitors (Earnshaw & Morrison, 2001) which have shown that requests of this type from patients may represent a growing problem. Moreover, it is a phenomenon which serves to understate the scale of work-related stress as well as its individual and organisational outcomes (Sainsbury Centre for Mental Health, 2007).

A programme of research is recommended on the development of guidance for general practitioners on how work-related stress might be addressed through the sick note in a manner that (i) is consistent with the requirements of the case definition used in personal injury litigation for evidence of a clinically recognised psychiatric disorder and (ii) may usefully assist employers in their decision-making activities in respect of whether a duty to take reasonable steps for the avoidance of harm might have been triggered by the employee's presentation to a general practitioner. Such a programme of research would be valuably underpinned by the development and provision of guidance for general practitioners on (i) the diagnosis of work-related stress in patients and (ii) the role of the general practitioner in making recommendations to employers on modifications to the psychosocial work environment that may help to alleviate a

patient's stress-related symptoms. This line of research is considered further in the following section and chapter 7.

5.8.2 Breach: Discussion and recommendations

Debate on the breach element of the case definition used in personal injury litigation for work-related stress has focused on the question of whether an employer's actions may be considered reasonable in response to knowledge having been gained of imminent or actual risk to an employee. Analysis of court judgments revealed that debate has centred on questions of (i) when and in what way the employee provided signs of imminent harm, (ii) when and in what way the employee complained, (iii) what steps ought to have been taken, (iv) when steps should have been taken, and (v) what effect the steps might have had.

The court judgments revealed a paucity of authoritative and consistent guidance on reasonable steps that an employer might take, when such steps might be taken and the effects they might be expected to produce. These are difficult issues since, unlike many physical injuries for which there is established and empirically validated employer guidance, there is no such guidance available in respect of psychological injuries. As Glozier (2002, p. 718) pointed out, "there is no uniformly applicable psychiatric wheelchair ramp". They are also issues that have not been adequately addressed in the courts owing to the fact that most claims fail at the foreseeability hurdle, prior to issues of breach being considered (Earnshaw & Morrison, 2001).

On the basis of these findings, a series of recommendations can be identified for the (i) clarification and reform of the structure and application of the breach element of the case definition and (ii) the development of guidance for stakeholders on its interpretation and application.

Recommendation 1: *Research on the role of the general practitioner in making recommendations on modifications to the psychosocial work environment*

The courts have struggled in their attempts to apply the *Hatton* guidance on the determination of what might constitute reasonable adjustments to prevent a breach in an employer's duty of care to an employee. Case law has revealed that the various agencies to which employers turn for advice may be ill equipped to provide useful information. Indeed, in the current study general practitioners and occupational health practitioners were shown to have rarely offered recommendations beyond those of a general nature such as 'light duties' or 'part-time work'. This is consistent with the findings of a Dutch study of general practitioners which found that in no cases where a patient was on sick leave with a mental problem attributable to work did general practitioners advise on work modifications (Anema, Jettinghoff, Houtman, Schoemaker, Buijs & van den Berg, 2006).

Research evidence suggests that part of the reason for the failure of general practitioners to offer useful recommendations to employers on psychosocial work modifications for patients suffering from work-related stress may lie in the fact that many are unaware that work can be beneficial for mental health. One survey of 1,500 general practitioners in Britain demonstrated that 64% were unaware that work can be beneficial for mental health and 90% of those

reported that if they were made aware of such evidence they would alter the advice given to patients (Department for Work and Pensions, 2007). One study based on interviews with sixty individuals claiming incapacity benefit for mental health problems (primarily depression and anxiety) revealed that in virtually no cases had a general practitioner asked about the claimant's work (Sainsbury et al., 2008). General practitioners also vary in their beliefs concerning their obligation and ability to deal with return to work issues (Mowlam and Lewis, 2005; Norwich Union Healthcare, 2005) for reasons including the risk of damaging the integrity of the doctor-patient relationship (Black, 2008). They may also fear litigation should accidents or injuries arise out of recommended modifications (Mowlam & Lewis, 2005). Underpinning these problems that together may generate reticence on the part of the general practitioner to engage in the provision of advice concerning modifications to work might lie a "wider lack of understanding about the impact of work on patient health and the role healthcare professionals can play in helping their patients to stay in or return to work" (Black, 2008, p. 65). This in turn may have its origins in the lack of training for general practitioners on such issues in their own professional training (ibid).

General practitioners are often the first point of contact for health problems (Faculty of Occupational Medicine, 2005). Indeed, general practitioners have reported a growth in presentations for work-related stress (Mowlam & Lewis, 2005) which has become among the most common problem that patients present with (Norwich Union Healthcare, 2005). Furthermore, the advice of general practitioners is known to be crucial to shaping a patient's belief about their ability to work and available courses of action (Black, 2008). As such, general practitioners might be considered well placed to offer advice on issues

associated with returning to work or continuing in work. Indeed, current government proposals for the replacement of the sicknote scheme with a fitnote system will require general practitioners to consider what a patient can do at work rather than what he or she cannot do and to liaise with employers in making recommendations on modifications to work (Black, 2008).

However, the findings above reveal the scale of the challenge to face general practitioners in providing useful recommendations on modifications to work for the alleviation of stress-related health problems that have their origins in, or are exacerbated by, work. Thus, a programme of research is recommended to investigate the nature of advice general practitioners provide to patients and their employers in respect of modifications to the design, management and organisation of work for the alleviation of symptoms of work-related stress. Should variance be found in advice given, or deficits evident in the nature of advice supplied (in terms of consistency with the empirical scientific evidence on the control and prevention of work-related stress), a case would present itself for the development of national guidance for general practitioners on the provision of advice to patients and employers in respect of psychosocial work environment modifications. The operation of case definitions for work-related stress in general practice is explored further in chapter 7.

Recommendation 2: The development of stakeholder guidance on effective steps that might be taken for a prevention of a breach in the duty of care.

In addition to the development of guidance for general practitioners, other stakeholder groups including employers, occupational health professionals, employees, trades unions, insurers and litigators would be well served by

guidance on steps that might be taken for the prevention of a breach in the duty of care through modifications to an employee's psychosocial work environment.

In terms of case law, the *Hatton* practical propositions offered some guidance on this score but these have been widely criticised on the grounds of having conveyed the impression that an employer might be excused from having taken reasonable steps due to resource constraints (Brodie, 2004). In terms of publications from authoritative bodies, with the exception of *Real Solutions, Real People: A Managers' Guide to Tackling Work-Related Stress* (Health and Safety Executive, 2003c), little or no evidence-based guidance has been developed that has specifically addressed work modifications as they relate to work-related stress. However, indirect guidance can be found in the findings of a study which reported on the experiences of 40 employers in making alterations for employees suffering from mental health conditions (primarily depression and anxiety). Among the successful alterations were included altered working hours, altered pace of work or breaks, changing 'stressful' elements of the job, working from home or altering the work environment, training, counselling, redeployment and informal support (Sainsbury et al., 2008).

The paucity of available guidance may explain the failure of many organisations to make alterations to the psychosocial work environment once aware of an employee's mental health problems. One survey of 319 employees, whose mental health problems had affected their ability to perform at work, found that in only 18% of cases had the employer sought to make alterations (Sainsbury et al., 2008). The failure of many organisations to act may also be considered surprising given the extent of knowledge and understanding in respect of the effects of the psychosocial work environment in sustaining a return to work

following illness (MacEachen, Clarke, Franche & Irvin, 2006). However, it may be attributable, in part, to the possibility that employers may not have traditionally perceived work factors to be as important as personal factors (absence of illness and motivation to work) in facilitating a sustained return to work following mental health-related absence (Vingård, Bengtsson, Waldenström, Ekenvall, Ahlberg, Nise & Svartengren, 2007). Furthermore, much of the research on the supported return to work of employees with psychological problems has focused on the needs of those with major psychiatric problems whereas relatively little research has considered work modifications to support return to work following absence attributed to comparatively minor psychological problems typically associated with work-related stress (Joner & Riekeles, 2007).

Thus, a comprehensive review of the available empirical literature is recommended to inform the development of guidance for stakeholders on reasonable steps that might be taken for the prevention of a breach in an employer's duty of care as it relates to work-related stress. Resulting evidence-based guidance would serve to update and supplement that available in *Real Solutions, Real People: A Managers' Guide to Tackling Work-Related Stress* (Health and Safety Executive, 2003c). Owing to the fact that much of the debate on the constitution of reasonable steps in work-related stress litigation has centred on a cluster of occupations, specifically teaching and social work, the development of specific guidance for these occupational groups might be sensible in addition to more generic guidance.

Recommendation 3: *Development of guidance for employers on psychosocial risk assessment procedures and their relationship to the establishment of breach*

Palliative counselling serves (also referred to as employee assistance programmes (EAPs)) exist at the opposite end of the spectrum to primary preventative interventions that are targeted at the design, management and organisation of work. Case law considered in the current study revealed a debate concerning which of the alternative approaches might be preferable on legal and scientific grounds. The Management of Health and Safety at Work Regulations (1999) promote psychosocial risk assessment activities that combat risks at source. It is therefore surprising that the eleventh of the *Hatton* practical propositions advocated the utility of the counselling services and went so far as to suggest that "...an employer who...[offers]...confidential help to employees who fear that they may be suffering harmful levels of stress is unlikely to be found in breach of duty..." (para. 33).

This proposition from *Hatton* has received legal criticism on the grounds that (i) it did not arise out of the facts of the appeals heard, (ii) it did not form the basis of legal argument, (iii) it appears incompatible with the statutory obligation upon employers to conduct risk assessments, and (iv) it failed to appreciate the organisational origins of work-related stress and concomitantly the efficacy of organisational-level interventions to reduce it (Buchan, 2002, 2004b, 2007). The proposition has also been widely criticised on moral grounds for its palliative as opposed to preventative approach to the management of work-related stress. It seems morally dubious to allow stress-related problems to develop to a point where health is harmed and assistance is sought before offering intervention. As Cranwell-Ward and Abbey (2005) have pointed out "This is like saying that a factory would not need finger guards on its machines if it had surgeons standing by to sew fingers back on!" (p. 107). The proposition may also be counter to

monetary efficiency. It makes financial sense for an employer to address stress-related problems early in their development through simple and low cost modifications to the psychosocial work environment; by the time counselling services are voluntarily engaged health problems may be of a magnitude that requires a period of sickness absence and costly rehabilitation. By that point the likelihood of return to work is diminished and the prospect of a litigious claim increased. Finally, the empirical occupational health psychology literature offers little support for the efficacy of EAPs (Arthur, 2002a, 2005; Carroll, 1996; Whatmore, Cartwright & Cooper, 1999).

Despite the various criticisms, this is perhaps the practical proposition with which employers are most familiar. It has also triggered the widespread adoption of EAPs as a line of defence against employer liability for stress. Indeed, EAPs may be perceived by employers as an “insurance policy against future claims” (Jamdar & Byford, 2003) and numerous EAP providers quote the practical proposition on their websites and the legal defence it affords as a reason to purchase their services (Ballard, 2007).

As discussed previously in the context of recommendations on foreseeability, the risk of harm arising out of the design, management and organisation of work may be established at an early stage, and in a manner consistent with statutory obligations, using psychosocial risk assessment procedures. Risk assessment activities are intimately linked to those on risk reduction within an overall risk management paradigm that involves the active participation of employees and their representatives in the design of risk reduction interventions. (Cox et al., 2000; Cox et al., 2002). Thus, in addition to clarifying issues of foreseeability, psychosocial risk management procedures may help inform the design of

modifications to the psychosocial work environment. In this way, the procedures may also help organisations to avoid triggering a breach in their duty of care.

This section has considered the theoretical, legal, psychological, economic and moral shortcomings of EAPs and noted the popularity of this approach among organisations. It has also been shown that psychosocial risk management procedures are consistent with statute, a contemporary theoretical understanding of the causes of work-related stress and may be usefully applied by organisations towards informing the design of interventions that may prevent a breach in the duty of care owed. The development of guidance is recommended on the application of psychosocial risk management procedures as they relate to the personal injury case definition for work-related stress and, specifically, the prevention of a breach in an employer's duty of care.

5.8.3 Causation: Discussion and recommendations

Court judgments revealed that debate on the causation element of the personal injury case definition as it applies to work-related stress has focused on two sets of questions concerning whether (i) the claimant had experienced an identifiable psychiatric illness and (ii) work had caused or materially contributed to development of the illness for which compensation was sought.

These findings are consistent with the results of a survey that canvassed personal injury solicitors involved in litigation for work-related stress (Earnshaw & Morrison, 2001). In respect of issues surrounding the requirement for evidence of a recognised psychiatric disorder, personal injury solicitors reported being largely of the opinion that a psychiatric diagnosis could be obtained in

most cases 'as a matter of course' provided sufficient funds were available. This may be interpreted in two ways. On the one hand it could be the case that psychiatrists might be willing to provide a diagnosis consistent with the desires of the counsel of employ. Indeed, one survey respondent suggested that 'it is more of a problem of finding a medical practitioner who will say what they think rather than what they think you want to hear'. An alternative interpretation is that only claims in which the solicitor has a high degree of certainty that a severe psychological injury has been experienced typically proceed to the stage of securing psychiatric reports.

In considering issues of causation, Earnshaw and Morrison's (2001) survey likewise supported the findings of the current study. Personal injury solicitors who responded to the survey perceived that legal examination of the causes of psychiatric injury associated with work-related stress can prove a major obstacle for both the defendant and claimant (*ibid*). The survey revealed that solicitors commonly had to trudge through a mass of documentation to ascertain the work-relatedness of injury. Solicitors for the claimant also reported having to consider carefully whether to proceed with a claim where the claimant had experienced trauma or psychological illness in the recent past that was unrelated to work; it was held that the defence counsel would usually seek to fatally damage a claim by pointing to such issues as a plausible alternative cause of psychiatric injury. Indeed, from the defence perspective such a line of attack would appear to be sensible given the suggestion that threatening life events possessing the capacity to bring forward an episode of depression occur approximately once every two years in most people's lives (Wessely, 1995).

On the basis of these findings, a series of recommendations can be identified for (i) clarification and reform of the structure and application of the causation element of the case definition and (ii) the development of guidance for stakeholders on its interpretation and application.

Recommendation 1: *Research on the nature of psychological illness associated with work-related stress and the associated development of guidance for litigators*

The results of the current study demonstrated that extensive courtroom debate has centred on the requirement of the personal injury case definition as it applies to work-related stress for evidence of a recognised psychiatric disorder. As noted by the Law Commission (1998), the question of whether psychiatric diagnosis offers an appropriate demonstration of harm associated with stress at work is hotly debated:

"We are aware...that there are strongly held views on this topic. On the one hand, there are those who are sceptical about the award of damages for psychiatric illness. They argue that such illness can easily be faked; that, in any event, those who are suffering should be able to 'pull themselves together'; and that, even if they cannot do so, there is no good reason why defendants and, through them, those who pay insurance premiums should pay for their inability to do so...On the other hand, medical and legal experts working in the field, who are the people who most commonly encounter those complaining of psychiatric illness, have impressed upon us how life-shattering psychiatric illness can be and

how, in many instances, it can be more debilitating than physical injuries" (para. 1.2)

Some of the dissatisfaction with the requirement of the courts for evidence of a clinically recognised psychiatric disorder stems from a belief that it may be possible for claimants to fake or exaggerate symptoms of psychiatric morbidity with a view to the maximization of a compensation award. However, the limited literature that exists on this difficult to study topic suggests that the exaggeration of psychiatric symptoms in legal claims is uncommon (Mayou, 1995, 1996). Furthermore, should it occur, techniques are available for its identification (Iverson & Lange, 2006).

Concerns have also been raised regarding the application of the DSM-IV diagnostic approach in a legal context. Originally developed for clinical, educational and research purposes, some have expressed concern that its use in a legal context may be inappropriate and compromise its integrity (Kendall, Murphy, O'Neill & Bursnall, 2000). In this vein, the Law Commission (1998) noted that numerous respondents to its public consultation (Law Commission, 1995) had expressed the opinion that the DSM-IV diagnostic categories failed to:

"reflect the psychological complexities of the impact of trauma" and "exclude some diagnoses that are generally accepted" leading to a situation whereby "in many cases the clinical diagnosis of a DSM-IV disorder is not sufficient to establish the existence of a mental disorder for legal purposes because of the imperfect fit between the questions of

ultimate concern to the law and the information contained in a clinical diagnosis” (para. 3.29).

Responding to the Law Commission’s (1995) report, Wessely (1995) observed that various national surveys have found that around one in five members of the general population may demonstrate signs of psychiatric morbidity at any one time. This fact, allied with “the current preoccupation with work-related stress” (Wessely, 1995, p. 663) does not equate to causation. It does, however, highlight the shortcomings of clinical diagnosis when applied within the legal context.

The Law Commission (1998) further highlighted the problem of vagueness in some DSM-IV diagnoses which could lead to a court requiring further evidence of harm supplementary to a psychiatric diagnosis. Such a situation could arise, it was suggested, where a diagnosis of acute stress reaction was applied. Acute stress reaction includes most ‘normal’ reactions to highly stressful events (Gelder, Gath, Mayou & Cowen, 1996) and as such could create a difficulty for the courts in personal injury cases for “the law does not compensate mere grief or distress” (Law Commission, 1998, p. 59).

A further concern associated with the measurement and identification of psychiatric illness in a legal setting is that of the stigma that may accompany diagnosis and adhere to the ‘labelled’ individual long after conclusion of court proceedings (Kendall et al., 2000). Such a label might have deleterious implications for future career progression and may explain the reticence of some claimants to reveal psychological problems to their employers. It is ironic and unfortunate that failure on the part of an employee to complain to an employer

or to seek medical assistance for psychological problems may later lead to evidential problems in court.

The traditional requirement of the courts for evidence of a recognised psychiatric disorder may also be problematic since it might preclude claims from individual's whose symptoms are psychological in nature but sub-clinical in terms of severity. The converse argument has also been made: that the psychiatric diagnosis criterion locates the severity threshold too low owing to the DSM-IV definition of a 'mild' condition as including symptoms that result in no more than minor impairment in social or occupational functioning. This provision may have the effect of permitting claims from those with only minor impairments to work-related functioning (Kendall et al., 2000).

In recognition of the diagnostic challenges as they relate to claims for psychiatric damage, the Law Commission (1998) considered whether it should recommend to government that (i) only specified psychiatric illnesses might qualify for compensation and (ii) these should be set out in legislation. In the event, the Law Commission decided not to put forward a recommendation on a list of qualifying psychiatric illnesses on the basis that it might be unjust and could add further complexity to an already complex system. Despite the Law Commission's reticence to prescribe certain psychiatric illnesses as stress-related for litigation purposes, the evidence presented here suggests that some form of prescription may indeed be useful. A programme of research is warranted to explore these issues with a view to the development of guidance for litigators on the strengths, limitations and interpretation of formal psychiatric diagnoses in the context of claims for work-related stress. It might be anticipated that such guidance may highlight the legal efficacy of

conceptualisations of psychological ill health alternative to the traditional DSM-IV and ICD-10 nosologies.

Recommendation 2: Research on the nature and assessment of work functioning associated with the experience of stress

Debate on the nature and measurement of psychiatric injury indicates scope for a radical reconceptualisation of what is meant by 'injury' in the context of personal injury claims for work-related stress. One possible development involves a shift in the investigative focus towards assessment of impairment to work functioning. A key question for a court is that of whether a claimant is able to continue in work; thus, it might be argued, an assessment of work functioning might provide evidence of no less validity to psychiatric diagnosis while avoiding many of the criticisms directed at the clinical approach.

There is some evidence of a legal shift taking place that involves a move from a focus on a named psychiatric illness towards a functional perspective on impairment. For example, a 2005 amendment to the Disability Discrimination Act removed the requirement for a claimant to demonstrate a 'clinically well-recognised' psychological illness and placed the focus instead on the degree of impairment to a claimant's ability to carry out normal day-to-day activities. The Law Commission (1998), perhaps inadvertently, alluded to the possible efficacy of such a shift in personal injury provision in its observation that the psychiatric diagnosis of harm inflicted by events perceived as stressful may not always be sufficient to identify those who require support. In this vein, the Law Commission (ibid) noted the results of a study on the effects of a plane crash in the Netherlands which had found that as many as 44% of survivors failed to

meet psychiatric diagnostic criteria for post-traumatic stress disorder. However, those same survivors were found to require similar levels of support to those who has met the criteria (Carlier & Gersons, 1995).

A shift from a focus on psychiatric illness towards functionality within the personal injury case definition would be consistent with a trend witnessed in recent years in law (in respect of the Disability Discrimination Act) as well as within occupational health provision (Tehrani, MacIntyre, Maddock, Shaw & Illingworth, 2007). Such a perspective is consistent with the wealth of empirical occupational health research that demonstrates associations between psychosocial hazard exposures at work and work functioning. Using tools such as the Work Ability Index (Tuomi, Ilmarinen, Jahkola, Katajarinne & Tulkki, 1998), several studies have, for example, demonstrated impairment to work ability attributable to the psychosocial work environment (Alavinia, van Duivenbooden & Burdorf, 2007; Lindberg, Josephson, Alfredson & Vingard, 2006) as well as associations between work ability and sickness absence (Kujala, Tammelin, Remes, Vammavaara, Ek & Laitinen, 2006).

The assessment of work functioning (including psychological aspects) is not a novel concept in the compensatory domain. As such, its introduction within the personal injury domain might not be as radical as perhaps it initially appears. For example, within the incapacity benefits system that operates in the United Kingdom, doctors are experienced in the application of the All Work Test (that includes a Mental Health Test) as a measure of ability to function in various work and non-work areas. As of autumn 2008, claimants of Employee Support Allowance (which will replace incapacity benefits), will be required to take a new test of work functioning: the Personal Capability Assessment (PAC). The PAC

offers an expanded mental function assessment and changes to the overall scoring system to ensure parity in the assessment of physical and mental problems (Henderson, 2007). Ahead of its introduction, it might be speculated that the aforementioned developments in the PAC may permit a superior assessment of stress-related problems to that of its predecessor.

Beyond the legal context, there is evidence of researchers in occupational health psychology having introduced functional assessments into their studies of work-related stress to supplement direct measures of stress. Scientific studies to investigate the efficacy of such approaches may be seen as an important prerequisite for the introduction of functional assessments within personal injury litigation. Evidence for the efficacy of the functional approach can be seen in the Stress and Health at Work (SHAW) study in which self-reports of perceived stress were validated by reference to accidents at work and sickness absence (Smith, 2001). Smith (ibid) further noted that integration of a functional dimension into case definitions for work-related stress may help to resolve the difficult question of where the cut-off point should be placed at which an individual might be identified as having a case. Support for this stance can be found in the suggestion that it might be appropriate to consider a cut-off at the point at which employees are unable to work (Schaufeli, 2004). The establishment of functional cut-offs is also beneficial in research terms as it might serve to draw the attention of researchers towards oft-neglected groups including those on sick leave, those who have left the organisation and those who are incapacitated and, in doing so, reduce the research focus on 'healthy' workers (Schaufeli, 2004).

In sum, a shift from psychiatric to functional assessment might increase the face validity and reliability of assessments of harm in personal injury claims for work-related stress. Furthermore, such a shift might introduce the added benefit of permitting claims that involve physical and sub-clinical psychological symptoms, both of which are fraught with difficulty under current arrangements. It might also be anticipated that an emphasis on employee functioning rather than ill health might lead to an increased focus on work rehabilitation as an alternative response to compensation-related activities.

A programme of research is recommended to examine (i) the nature and assessment of stress-related occupational functioning problems and (ii) the feasibility of the integration of a functional perspective into personal injury litigation for work-related stress as an alternative to the existing injury-focused approach. Findings that advance knowledge on the association between the experience of stress and work functioning might usefully contribute to the development of the case definition employed in personal injury litigation for work-related stress.

Recommendation 3: Literature review on non-psychological manifestations of work-related stress and the development of guidance

The current study revealed the acknowledgment of the courts that work-related stress may manifest in physical symptoms. However, claims involving physical disorder are virtually non-existent. One reason for this might be the paucity of evidence-based guidance available for litigators on the range and nature of physical disorders associated with stress.

A comprehensive review of the scientific occupational health psychology and related literatures is recommended to elucidate the primary physical disorders that might be associated with stress. It is recommended that the review focus primarily on the most robust, longitudinal, data. It is further recommended that its results are translated into practical guidance to facilitate the pursuit of claims that involve physical manifestations of harm. It may be speculated that equipped with such guidance, the courts might demonstrate an increasing willingness to consider personal injury claims for work-related stress that involve injuries of a physical nature.

5.8.4 Miscellaneous procedural issues associated with application of the personal injury case definition

The preceding sections of this discussion have considered issues associated with three elements of the case definition used in personal injury litigation for work-related stress: foreseeability, breach and causation. The analysis of court judgments provided an effective means by which to identify challenges associated with the structure, interpretation and application of the case definition. However, the analysis was limited in its ability to identify a set of procedural issues peripheral to the case definition which, nevertheless, have a bearing on its application. These include challenges presented by (i) the Limitation Act, (ii) conditional fee arrangements, and (iii) the emotional burden of litigation. Each is briefly discussed in order to present a more complete picture of the procedural and human context in which the personal injury case definition as it applies to work-related stress operates.

The Limitation Act

The Limitation Act (1980) ensures that employers cannot be held liable for injury indefinitely. The Act stipulates that legal proceedings must be brought within three years of the injured person having acquired knowledge of the damage rather than the date damage occurred. This is problematic in the context of psychological injuries arising out of work-related stress; it may not be unusual for an extended period of time to have elapsed, perhaps more than three years, between insight of the work-relatedness of the injury being gained and solicitors appointed. Indeed, one survey of personal injury solicitors found this to be the single greatest procedural barrier to litigation for work-related stress (Earnshaw & Morrison, 2001). Although judges may exercise discretion in its application, Earnshaw and Morrison's survey found that "many judges took the view that they [litigators] should know the time limits and issue proceedings even if they have not collated all the evidence to prove whether the injury is, in fact, work-related" (p. 477). Although it may be fair to expect solicitors to be aware of the provisions of the Act, it may be less reasonable to extend that expectation to claimants.

The Act also sits uncomfortably with the nature of psychological injury arising out of work-related stress. It is not unfeasible that a potential claimant may procrastinate for an extended period of time over the question of whether to take legal action. Such postponement may be motivated by, among other things, fear of the unfamiliar legal system or uncertainty about whether the emotional resources required in the pursuit of compensation are possessed. Psycho-legal research is warranted to investigate how the Act might be applied

in claims for work-related stress in a consistent manner that is perceived as fair by all stakeholders.

Conditional fee arrangements

The second issue for consideration is that of conditional fee, i.e., 'no win no fee', arrangements (CFA) in personal injury claims for work-related stress. There is evidence that solicitors generally find it more difficult to make assessments of the likelihood of a successful claim where psychiatric injury is concerned (Earnshaw & Morrison, 2001). As such, CFAs might be inappropriate in claims of this type (Zindani & Korn, 2004). Owing to the ambiguity and complexity surrounding the make-up of a successful case, lawyers need to spend several hours with a potential claimant before judging the merits of the case; a financially untenable situation under CFAs. As Cooksley (2005, p. 56) notes, "if for every 20 cases considered you only have one or two potential runners, where does this leave you financially?" The consequences of CFAs can be seen in the growing number of litigators operating under CFAs who have taken out insurance against the possibility of losing a work-related stress claim. Some insurers have refused to provide such cover owing to the difficulty in predicting outcome whereas others have set premiums as high as £35,000 (reported in *The Guardian*, 25 November, 2003). Research to examine the full implications of CFAs in the context of litigation for work-related stress is warranted. Should it be found that a high proportion of potential claims fail to be taken to court owing to CFAs a comprehensive review of their operation would be advisable.

The emotional burden of litigation

A third issue is that of the emotional burden of litigation. There is little evidence available on the question of whether litigation for work-related stress reinforces a claimant's injury. Nevertheless,

"although the legal system would, in theory, like to see itself as something above the processes that lead to psychiatric disorder (and hence that plaintiffs should be the disinterested academic observers of their own condition), the reality is that litigation must take its place as a further factor contributing to the maintenance of psychiatric disorder" (Wessely, 1995, p. 665).

Most of the scientific research in this area derives from claims for injuries unrelated to work-related stress. Mendelsen (1995), for example, examined what has become known as 'compensation neurosis' in 760 personal injury litigants in pursuit of compensation for a range of industrial or automobile accidents. He found that of those who had not been working at the completion of legal proceedings, 75% of this number remained out of work two years later. This finding allows for tentative conclusions to be drawn on the long-term psychological impact of litigation. A limited body of research exists on the health implications of litigation for work-related back pain (Guest & Drummond, 1992) and motor vehicle accidents (Blanchard, Hickling, Malta, Jaccard, Devineni, Veazey & Gavloski, 2003; Blanchard, Jones-Alexander, Buckley & Forneris, 1996; Koch, Shercliffe, Fedoroff, Iverson & Taylor, 1999). It is perhaps unsafe to extrapolate the findings of this latter group of studies to work-related stress since unlike a motor vehicle accident, work-related stress is, by definition,

related to a context (work) to which the individual is required to return on a regular basis.

Beyond the personal injury domain, studies have consistently found that the compensation process is liable to make claimants feel stigmatized and lacking in sympathy. In the context of workers compensation schemes in Canada (Eakin, MacEachen & Clarke, 2003) and Australia (Roberts-Yates, 2003), these factors have been shown to have a negative impact on health. One of the most well-known researchers on the topic of occupational safety and health legislation and its psychosocial consequences is Katherine Lippel of the University of Ottawa. Lippel is a powerful communicator of the 'therapeutic jurisprudence' perspective: the idea that the law can be used as a therapeutic agent (Lippel, 1999a). Lippel's research has its focus on the effects of American and Canadian workers' compensation systems on physical and mental health and, in some cases, specifically in relation to work-related stress (e.g., Lippel, 1999b). Consistent with the findings described above, Lippel's studies have shown that the compensation-seeking process can stigmatize a claimant which, along with the power imbalance between a claimant and other actors in the process, can in turn have a deleterious impact on a claimant's mental health (Lippel, 2007).

In the context of personal injury litigation for work-related stress, there is some evidence to suggest that prospective claimants may choose not to pursue litigation owing to the unwelcome prospect of lengthy and traumatic proceedings (Earnshaw & Morrison, 2001). Likewise, some solicitors choose not to take on clients whom they believe may not be up to the rigours (ibid). The road to compensation is a long one; it is estimated that the average personal injury claim (all types) takes 1000 days (Association of British Insurers cf. Trades

Union Congress, 2006b). Where a judgment is appealed the time course can be lengthened considerably. Such could be seen in the case of *Barber*. Appealed on two occasions, eight years elapsed between the claimant's second episode of psychiatric injury and the final award of damages. *Barber* also revealed the possible challenges to a claimant's emotional stability that might arise out of a defendant's attempts at discrediting the claimant's motives for pursuing litigation. In court, the defendant attempted to present a picture of Mr Barber as a malingerer who had attempted to work the system in order to secure an enhanced pension and early retirement on the grounds of ill health – an argument, incidentally, rejected by the judge.

In view of the duration of legal proceedings, it is not surprising that the litigation process itself may, in some cases, contribute to prolonging an episode of psychiatric illness initially attributed to work-related stress. Such was the case in *Martindale v Oxfordshire County Council* [2004] where the psychiatric report recorded that the claimant had suffered an adjustment disorder with anxiety and depressed mood which 'recognised the relationship between his symptoms and the stresses arising from his experiences at work, grievance procedures and the continuing litigation'. The report further noted 'no prospect of significant progress until the litigation process is finished and Mr Martindale changes the focus of his life...most of his considerable mental abilities and energies are focused on his grievences and legal claim'. Indeed, in recognition of the traumatic nature of proceedings, many clinicians refuse to treat patients engaged in personal injury litigation on the assumption that improvement is unlikely while the litigation process is played out (Koch, Douglas, Nichols & O'Neill, 2006).

The emotional burden of litigation for work-related stress appears to be an issue neglected by the courts. Some court judgments have indicated the unhelpful nature of lengthy trials in work-related stress claims, but have focused concern on financial rather than health implications. Such was the case in the *Hartman* appeal in which Scott Baker LJ noted that each of the conjoined cases had been:

“fought over many days at great expense and...the time and cost are disproportionate to the real issues in the case and the true value of the claim...Great care needs to be taken when preparing for trial to isolate the real issues between the parties and to ensure that expenditure on costs is proportionate to what is truly at stake” (para. 3).

Three questions arise that require further investigation. First, what are the health implications of personal injury litigation for work-related stress? Second, could the litigation process be expedited for the alleviation of suffering in claims for work-related stress? Third, does the legal system have a responsibility to address the trauma associated with litigation through, perhaps, the provision of professional counselling support during the litigation process?

5.8.5 Radical case definition reform: The placement of work-related stress in statute

This discussion has thus far made recommendations for further research and the development of guidance that could reduce ambiguity and uncertainty on the structure and application of the personal injury case definition as it applies to work-related stress and, in doing so, enhance (or at least clarify) consistency between this case definition and that developed in chapter 3 for use in large-

scale, nationally-representative workforce surveys. Such initiatives might influence the development of the case definition through future judicial decisions. In this way, the challenges associated with the case definition that have been identified in the current study might be alleviated incrementally. Alternatively, more radical case definition reform may be achieved through the introduction of legislation that is specific to work-related stress. This section considers the feasibility of putting this area into statute.

The introduction of specific legislation on work-related stress would constitute a radical departure from current legal approaches to dealing with the problem. The preferred route for the development of law is through judicial decisions. Only where it is believed that the law has taken a dramatically wrong turn, where the government of the day feels that insufficient cases are coming to court to allow the law to develop or conversely where it believes that too many cases have been brought, particularly where conflicting decisions have arisen, is legislation usually considered (Law Commission, 1998). Some stakeholders have argued that work-related stress might not be best addressed through the case definition encapsulated within personal injury claims; rather, a case definition enshrined in legislation is required (Nolan, 2004).

Some of the discontent with the personal injury approach to compensating for work-related stress has arisen out of the failure of claims, such as *Hatton*, to clarify how the case definition, i.e., the ordinary principles of employer liability, ought to be interpreted and applied (Brodie, 2004; Buchan, 2004b; Jamdar & Byford, 2003; Patten, 2004). In this vein, some commentators have pointed to incompatibilities between specific characteristics of stress-related injuries and the personal injury case definition as evidence that this area of law should be

placed in statute. For example, it has been suggested that stress-related psychiatric injuries might develop in a manner that is qualitatively different from the development of physical injuries caused by work; whereas the former may tend to develop gradually over an extended period of time, the latter might be more likely to involve a sudden onset following an accident (Sprince, 1998). Over the extended period of time during which psychiatric symptoms may develop, opportunities are likely to exist for the individual to receive exposure to a range of non-work-related psychosocial hazard exposures. In a courtroom, it is likely that the defence counsel would point to these exposures, be they bereavement, divorce etc, as offering a plausible alternative cause to the illness for which compensation is claimed. In this way, the issue of causation demonstrates how the ordinary principles of employer liability, originally developed to address physical injuries, may be limited in their ability to adequately accommodate psychological injuries.

Others have suggested that work-related stress ought to be removed from the personal injury arena and placed in statute on the grounds that "occupational stress seems intuitively to be a problem most caused by social structures, thus naturally lending itself more to 'collectivist' solutions rather than fault mechanisms that are steeped in the logic of individualistic blame" (Sprince, 1998, p. 77).

Examination of stakeholder opinion reveals some evidence that the relocation of work-related stress into statute might be welcomed. British trades unions have long lobbied for legislation on work-related stress (Tudor, 2002). Indicators suggest that some within the legal profession would likewise welcome stress-specific legislation. One survey of personal injury solicitors showed that a large

number of respondents held the opinion that although existing health and safety legislation does not differentiate between physical and psychosocial hazards, few employers make a concerted effort to manage exposure to the latter. The consensus was that only specific legislation would be sufficient to focus employers' attention (Earnshaw & Morrison, 2001). Indeed, the courts have intimated that legislation specific to work-related stress might not be inconceivable should certain knowledge developments facilitate such a move. In the influential case of *Hatton*, the Court of Appeal observed that:

"If knowledge advances to such an extent as to justify the imposition of obligations upon some or all employers to take particular steps to protect their employees from stress-related harm, this is better done by way of regulations imposing specific statutory duties. In the meantime the ordinary law of negligence governs the matter" (para. 16).

A similar stance was evident in responses to the Health and Safety Commission's consultation document on the management of work-related stress (Health and Safety Executive, 1999). 78% of consultation respondents endorsed the notion of a legally binding Approved Code of Practice (ACoP⁶) (Health and Safety Executive, 1999). Feedback documentation to consultation respondents noted that an ACoP was not possible in the absence of recognised standards of management practice for work-related stress against which inspectors could gauge the performance of employers, a decision punningly referred to by the Trades Union Congress as 'a cop out' (Trades Union Congress, 2000). The

⁶ An Approved Code of Practice (ACoP) expresses specific measures which employers can take to ensure the goals set out in Regulations are met. ACoPs for work-related stress would form the third tier within health and safety legislation, below the relevant Act of Parliament (Health & Safety at Work Act, 1974) and Regulations (Management of Health and Safety at Work Regulations, 1999).

document went on to note that the Health and Safety Commission remained open to and would revisit the notion of regulation once standards of management practice for work-related stress had been developed. Such standards were published by the Health and Safety Executive in 2004 (Cousins et al., 2004; Mackay et al., 2004). As such, a central obstacle to the introduction of legislation has been removed and the debate may yet be revived.

The introduction of the Health and Safety Executive's Management Standards for work-related stress might have provided a foundation for activities on the development of specific legislation on work-related stress in other, less anticipated, ways. In 2003, the Health and Safety Executive issued its first Improvement Notice⁷ to an employer for failure to adequately address work-related stress in its workforce (Health and Safety Executive, 2003b). In addition to requiring the recipient, West Dorset General Hospitals NHS Trust, to reform its approach to the prevention and control of work-related stress, the Improvement Notice sent out a strong signal that the Health and Safety Executive was willing to shift the management of work-related stress from the civil into the criminal domain. In this way the move was described by one commentator as moving "stress factors from the cosy area of civil dispute, which can be resolved with the agreement of the parties, into the majesty of criminal law, where once a charge is laid, and a finding of guilt is made, the wrongdoer is criminalised and penalised" (Goldman & Lewis, 2003, p. 10). The shift was reinforced in 2007 through public statements from the Health and Safety Executive to the effect that it intended to step-up enforcement of the Management Standards (or equivalent) risk assessment procedures. To that

⁷ An Improvement Notice may be issued for contravention of a statutory duty. Failure to comply with the requirements of an Improvement Notice may result in criminal prosecution.

end, guidance for inspectors on how to inspect for work-related stress and how to write an enforcement notice was issued in 2008 (Health and Safety Executive, 2008). The gradual relocation of work-related stress into the criminal domain might reasonably be interpreted as an indicator of legislation for work-related stress being not inconceivable.

A contrasting perspective on the placement of work-related stress in statute can be found in the Law Commission's (1998) review of the law surrounding damages for psychiatric injury. The review focussed primarily on injury, particularly post-traumatic stress disorder, arising out of accident or some other traumatic event. However, in its recommendations for reform, the Law Commission touched briefly on the issue of work-related stress. By reference to *Walker*, it recommended that, "There is no need for legislation specifically dealing with liability for psychiatric illness suffered through stress at work" (7.23). The Law Commission held that it was "reluctant to suggest any legislative intervention when we believe that the common law is developing along the right lines" (7.22). As noted by Barrett (1998), the Law Commission appeared to be of the opinion that to move the area into statute would "freeze the law before medical knowledge and legal understanding of psychiatric illness, its causes and its effect, are sufficiently mature" (p. 108). More than a decade has elapsed since the Law Commission made its pronouncement on the state of knowledge on stress-related illness. In the intervening period considerable developments have been achieved in our knowledge and understanding on the causes, nature and consequences of work-related stress. As such, a review of the contemporary scientific literature might be warranted that could possibly force a reconsideration of the Law Commission's stance.

In sum, there have been a number of authoritative statements and actions on the question of whether work-related stress ought to be brought into statute. Desire for such a move appears widespread, underpinned by an appreciation of the seriousness of stress-related injuries attributed to work as well as recognition of the limitations of the personal injury case definition for dealing with injuries of this type. Should debate on legislation intensify, further research will be warranted on the development of a legislative case definition for work-related stress. As has been advocated throughout this chapter, such research endeavours would benefit from a consideration of the contribution of empirical evidence from the occupational health psychology and related literatures; the interplay between work-related stress and the law requires a psych-legal perspective that recognises the role of scientific knowledge in shaping the legal position. Only in this way can a case definition be developed that is fit for legal purpose while remaining consistent with contemporary scientific knowledge on the causes, nature and consequence of work-related stress.

5.9 Conclusions

The content analysis methodology applied in the study described here was shown to be efficacious for permitting a comprehensive investigation into issues of debate associated with the structure, interpretation and application of the personal injury case definition; that is, the ordinary principles of employer liability as they apply to work-related stress. A series of recommendations were advanced to address the identified issues. The introduction of these might serve as a basis for future activities targeted at the enhancement of consistency between this case definition and that developed in chapter 3 for use in large-

scale nationally representative workforce surveys. The recommendations identified a role for the application of research evidence from occupational health psychology and related disciplines in addressing legal questions. Perhaps surprisingly, given the applied nature of the discipline, the use of scientific evidence from occupational health psychology in addressing legal questions that pertain to work-related stress remains a largely untouched area. The current study illustrates the scope for the application of theory and empirical evidence from occupational health psychology to the development of case definitions used in a legal context.

6. THE SOCIAL CONSTRUCTION OF CASE DEFINITIONS FOR WORK-RELATED STRESS

Chapter 3 highlighted the importance of the personal injury case definition for work-related stress to informing stakeholder activities on tackling and defining work-related stress. Since most people do not have first hand experience of litigation, awareness and understanding may largely be constructed through media reports. As such, these could have an important role in shaping activities on work-related stress. This raises a set of questions about the relationship between media representations and stakeholder activities. The study described in the current chapter addresses three questions in the context of the British daily newsprint media. First, is the newsprint media an important source of information concerning personal injury litigation for work-related stress? Second, are the newsprint media representations characterised by particular features? Third, what implications for activities directed at tackling and defining work-related stress might arise out of these representations? Forty two germane articles were identified, published over a twelve year period between 1996 and 2007. These were analysed using a critical discourse analytical technique that had its focus on three elements in the text: themes evident at the headline level, lexical cohesion within headlines and stakeholder voices evident within the articles. The study reveals, among other things, that personal injury litigation for work-related stress is represented (i) as financially costly to organisations, (ii) largely a public sector problem, and (iii) with little contextualising guidance on stress management activities that organisations might adopt. It is concluded that the representation may offer one explanation for the importance ascribed to the personal injury case definition by subject-matter experts in the study described in chapter 3 to influencing stakeholder actions on work-related stress.

It may also explain the desire expressed by subject-matter experts for consistency between this case definition and that developed for use in large-scale nationally representative workforce surveys.

6.1 Introduction

Preceding chapters in this thesis have explored the design, application and development of case definitions for work-related stress in the large-scale nationally representative workforce survey domain and the personal injury domain, as well as relationships between the case definitions used in these contexts. A key finding from the study described in chapter 3 concerned the centrality of personal injury litigation for work-related stress, and the case definition used therein, to informing stakeholder activities on tackling the challenge to occupational health presented by work-related stress. A range of activities were found to take their influence from the personal injury case definition. These included trend identification, policy formation, absence and wellness management, the assessment of the merits of potential legal claims and justice seeking activities. This finding was consistent with evidence from organisational case study research that has identified the rise in personal injury litigation for work-related stress among the major factors that have motivated organisations to act on tackling stress (Cox et al., 2007; Tasho et al., 2005).

The importance ascribed by stakeholders to personal injury litigation for work-related stress, and the case definition used therein, in shaping their activities on

work-related stress raises a question concerning what factors might underpin its influential status. Since most people do not have first hand experience of personal injury litigation for work-related stress, the weight it brings to bear on shaping activities might be considered surprising. One factor that might account for its importance in this respect is the character of its representation in media texts: it is possible that newsprint representations characterise personal injury litigation for work-related stress in a manner that serves to motivate and shape stakeholder activities on tackling and defining work-related stress. In this way, media reports of litigation could have an important role in directing stakeholder activities on the management of work-related stress.

This raises a set of questions concerning the relationship between media representations of personal injury litigation for work-related stress and stakeholder activities on work-related stress. The study presented in this chapter sets out to examine three specific questions. First, is the media an important source of information concerning personal injury litigation for work-related stress? Second, are media representations of personal injury litigation for work-related stress characterised by particular features? Third, what implications for activities directed at tackling work-related stress might arise out of these representations? The study addresses these three related questions through a content analysis of the representation of personal injury claims for work-related stress in the British daily newsprint media.

The contents of this chapter are located towards the end of this thesis by way of presenting a possible explanation for why subject-matter experts who participated in the study described in chapter 3 identified personal injury litigation for work-related stress, and the case definition operated therein, as

being of particular importance to motivating and shaping stakeholder activities on tackling and defining work-related stress. There is some reason to think that newsprint articles might be influential in this respect. Few stakeholders have first hand experience of personal injury litigation for work-related stress; as such, information on litigation must be received from a secondary source. It has been suggested that one such source might be newsprint articles since “business leaders read major newspapers more regularly than academic journals” and as such “the popular press [has] much more of an impact on what happens in organisations than academic research” (Abrahamson, 1991, 1996, cf. Patton & Johns, 2007, p. 1580).

The next two sections provide a theoretical and empirical backdrop to the study that follows. A theoretical account is provided of relations between media representations of events, the construction of awareness and understanding of those events and the shaping of actions. That is followed by an overview of the scientific literature on the representation of work-related stress in the media.

6.2 Media representations, discourses and the construction of understanding and behaviour

This chapter takes a social constructionist perspective to understanding relationships between media texts and stakeholder actions on tackling work-related stress. This perspective holds that “social phenomena are socially constructed, i.e., people’s concepts of the world they live and act within contribute to its reproduction and transformation; and that social phenomena are socially constructed in discourse” (Fairclough, 2005, p. 915-916). In this

way, the social constructionist perspective allows for links to be conceptualised between the representation of events in media texts, knowledge and understanding of those events and subsequent actions and behaviours. In the context of the current study, the perspective permits an examination of relations between the newsprint media representation of personal injury claims for work-related stress and stakeholder activities on work-related stress.

Within this theoretical perspective, the discourse associated with the representation of events in a media text plays a key role in determining subsequent actions. A discourse can be defined as "a connected set of statements, concepts, terms and expressions which constitutes a way of talking or writing about a particular issue, thus framing the way in which people understand and respond with respect to that issue" (Watson, 1995, p.814). In essence, therefore, a discourse can be construed as "the language used in representing a given social practice from a particular point of view" (Fairclough, 1995, p. 56). In this way, media texts "do not merely mirror realities as is sometimes naively assumed; they constitute versions of reality in ways which depend on the social positions and interests and objectives of those who produce them" (Fairclough, 1995, pp. 103-104).

Fundamental to understanding the interplay between discourses and social events (such as stakeholder actions on tackling work-related stress) is the notion that language plays a key role in the construction of social reality. The social constructionist perspective conceptualises language as not merely offering a name or description to reality but, rather, a frame within which to understand reality which "promotes particular attitudes and discourages others" (Oswick, Keenoy & Grant, 1997, p. 6). In this way, it is held that media texts contribute,

to varying degrees, to shaping society and culture and specifically social identities, social relations and systems of knowledge and belief (Fairclough, 1995).

6.3 Media representations of work-related stress

Historically, applied psychologists have undervalued the analysis of media representations of health and health-related issues, possibly due to a belief that such analyses belong to the realms of sociology or media studies (Lyons, 2000). However, the critical analysis of media texts is of value to psychologists given that (i) individuals exist in a social context and gain their beliefs about health and health-related matters from the representations, discourses and constructions that they encounter, (ii) media representations of health and health-related issues produce and reproduce meaning concerning these issues for professionals and lay people alike, and (iii) media representations mediate peoples' real and lived experiences (ibid).

As such, it is perhaps surprising that occupational health psychology has been slow to embrace the analysis of media representations both as an intrinsically valuable scientific methodology and for what this form of analysis may reveal about the beliefs and actions of individuals and organisations. Only in recent times have researchers in the discipline begun to consider the social construction of work-related stress (Bicknell & Liefoghe, 2006) and how this might relate to behaviours such as absence (Kinman & Jones, 2005) and the reporting of stress (Furnham, 1997). Some have reported on the increase in media reports that concern work-related stress (Stansfeld et al., 2004) but

investigations into the representation of work-related stress in media texts remain rare (e.g., Lewig & Dollard, 2001).

Lewig and Dollard's (2001) study is particularly notable in the context of the current chapter. The study presented a content analysis of the representation of work-related stress in Australian newsprint articles across a twelve month period. It concluded that work-related stress was generally characterised as an "economically costly epidemic, as an outcome of unfavourable work conditions but with individual remedies, and as primarily situated within the public sector" (p. 179).

Viewed from a social constructionist perspective, Lewig and Dollard's (2001) findings highlight the scope for research that involves the examination of newsprint representations of personal injury litigation for work-related stress. Such research may hold the potential to reveal insights into the nature of representations and their relationship with stakeholder beliefs and actions on tackling work-related stress.

6.4 The current investigation

The study presented here takes as its stimulus the finding from the study presented in chapter 3 concerning the importance ascribed to the personal injury case definition for work-related stress in terms of its role in guiding stakeholder activities on work-related stress. That finding raised the question of what factors might determine the status of the personal injury case definition in this respect. Given the social constructionist perspective on the relationship

between representations, discourses and actions, it is possible that media representations of personal injury claims for work-related stress might contribute to the importance ascribed to this form of litigation in guiding stakeholder activities.

Thus, in fulfilment of the fifth aim of this thesis, the study considers three related questions in the context of the British daily newsprint media. First, is the newsprint media an important source of information concerning personal injury litigation for work-related stress? This question is of importance given that issues that are reported in the media tend to be viewed as important and deserving of public discourse (Frost, Frank & Maibach, 1997). Second, are newsprint media representations characterised by particular features? This is of importance given that the media representation or portrayal of an issue is often influential in defining attitudes towards that issue (Lyons, 2000). Third, what implications for activities directed at tackling work-related stress might arise out of these representations? If it is accepted that attitudes generated by the media can influence behaviours (Frost et al., 1997), it would be expected the characteristics of representations would contribute to the generation of organisational responses.

These questions are investigated through a content analysis of British daily newsprint articles. In this way, the study also addresses the sixth aim of the thesis: the examination of the utility of content analysis methodologies in the scientific study of case definitions for work-related stress. The scientific analysis of the representation of events in newsprint articles has grown in popularity in recent years (Harding, 2006; Pietikäinen, 2003; Stamou, 2001) and the methodology has increasingly found favour in the occupational health

psychology and related scientific literatures (Lewig & Dollard, 2001; Patton & Johns, 2007). The application of the methodology to an examination of the newsprint representation of personal injury litigation for work-related stress remains a novel endeavour.

6.5 Method

6.5.1 Data sources

As noted by Krippendorff (2004), within a content analysis the texts used as the basis for analysis do not represent a sample of a population of texts; rather, they constitute the population of relevant texts. As such, this study sought to identify all the relevant articles published in the leading high-circulation British newsprint titles across a stated time period.

The British newsprint media is divided across the broadsheet and tabloid categories. These may be defined respectively as “chiefly British, a newspaper printed on large paper, usually a respectable newspaper” (Random House Unabridged Dictionary, 2006) and “a newspaper of small format giving the news in condensed form, usually with illustrated, often sensational material” (American Heritage Dictionary of the English Language, 2000). Newspaper articles were obtained from the five leading daily broadsheet newspapers in Britain (average daily circulation figures in parenthesis⁸): The Daily Telegraph (911,454), The Times (670,054), the Financial Times (439,104), The Guardian (384,070) and The Independent (263,503), as well as the four leading daily

⁸ Source: Audit Bureau of Circulations. Period covering 1 January 2007 to 28 January 2007.

tabloid newspapers: The News of the World (3,426,719), The Sun (3,217,844), The Mirror (2,382,925) and the Daily Mail (2,354,028).

Articles were collected using the article search facility on the website of each newspaper. All articles containing the word 'stress' were collected and scrutinised manually to identify those that pertained to personal injury claims for work-related stress. Articles were gathered for the period 1 January 1996 to 8 February 2007. Due to website search engine limitations, articles from the Financial Times were gathered for the period 8 February 2002 to 8 February 2007, the Daily Mirror for the period 1 January 2001 to 8 February 2007 and the Daily Mail for the period 1 January 2000 to 8 February 2007. The 1996 start date was chosen because few work-related stress personal injury claims had appeared in the courts before that date and few electronic article search facilities covered the pre-1996 period.

The search was restricted to articles that reported cases heard in the English courts involving personal injury claims for work-related stress arising out of a breach of the employer's duty of care. The search encompassed articles that reported judgements and out of court settlements – reports of ongoing court proceedings were not collated. Bullying and post-traumatic stress disorder claims were also excluded for although many of these claims had some overlap with work-related stress, their primary focus was elsewhere.

6.5.2 Data analysis: Critical discourse analysis

Fairclough's (1995) critical discourse analysis approach was used to examine the representation of personal injury claims for work-related stress in newsprint

reports. This form of content analysis was specifically developed for the analysis of media discourses and constitutes a variant on earlier theoretical and methodological perspectives advanced by the same author (Fairclough, 1989, 1992, 1993).

Fairclough's approach allows for media discourses to be analysed in terms of (i) text (vocabulary, semantics, grammar, phonology, textual organisation and overall structure), (ii) discourse practice (the processes of text production and consumption), and (iii) sociocultural practice (the social and cultural environment in which the discourse was issued). This study takes as its focus a critical discourse analysis of text (also referred to as 'linguistic analysis').

In linguistic analysis the focus is on the representation of events in texts. The fundamental assumption that underlies analysis of the representation is that "media texts do not merely 'mirror realities' as is sometimes naively assumed; they constitute versions of reality in ways which depend on the social positions and interests and objectives of those who produce them" (Fairclough, 1995, pp. 103-104). In other words, the choice of text and its positioning reveals something of the knowledge, understanding and ambitions of the author. Linguistic analysis is purely descriptive rather than interpretive; the focus is on the representation of the phenomenon in textual form and structure. The analysis does not overtly facilitate the interpretation of the message conveyed by the text. This is presented as a strength of the method since it serves to reduce the potential for subjectivity that may be apparent in interpretations of text.

Linguistic analysis was conducted on three elements in the text: themes, lexical cohesion and stakeholder voices. Each is described below.

Themes

Linguistic analysis of themes evident in the representations was conducted at the headline level. It has been suggested that headlines offer a sound basis for the analysis of themes in media representations (Kasperson, Kasperson, Perkins, Renn & White, 2005) since they “set the tone of the article, and are often the only information the reader will read” (Lewig & Dollard, 2001, p. 182). Furthermore, the act of positioning text in the informationally prominent headline position serves to push the information into the foreground and may provide an indication of the focus taken in the story (Fairclough, 1995). In this way, the headline sets an orientation frame that may affect the way that the story is read and interpreted. Articles were manually searched for evidence of themes. Descriptive statistics were used to build an overall picture of themes.

Lexical cohesion

Analysis of lexical cohesion, i.e., the way in which words are connected into a coherent sequence, was likewise conducted at the headline level. Analysis of lexical cohesion is important for it “provides the discourse analyst with a key to unravel the potential ideological construction that underlies a text” (Erjavec, 2004, p.571). In other words, it offers a clue to the intentions of the author in terms of the type of discourse they wished to present. Articles were manually searched for evidence of lexical cohesion between words that described the

claimant and the sum of compensation. Descriptive statistics were used to build an overall picture of lexical cohesion.

Stakeholder voices

Linguistic analysis of stakeholder voices present (and otherwise) was conducted to examine (i) the extent to which the representations of claims included guidance for readers on preventative stress management activities and (ii) those stakeholder groups that were associated with the dispensation of such advice.

Fairclough's (1995) framework for the analysis of representations in media texts distinguishes between primary and secondary discourses. The primary discourse is created by an article's author. The secondary discourse is made up of the other voices in the text (and in some cases those that are omitted). Manufacturers of secondary discourses include the key players mentioned in the article as well as 'experts' whose contributions are often embedded to instil heterogeneity (Sunderland, 2006), i.e., to inject something unique. Thus, the focus of analysis here was on the secondary discourse.

Stakeholder voices were identified via a manual search of all articles for quotations. Quotations made in court during litigation proceedings were excluded from analysis; only those made out of court following a judgement or settlement were included in the analysis. Descriptive statistics were used to build an overall picture of the dominant voices.

6.5.3 Coding

Coding involved a two-step process. In the first step, each article was manually coded for (i) newsprint title, (ii) date, (iii) stakeholder voices that could be identified in the body of the text, and (iv) the nature of message conveyed by

those voices. In the second stage of coding each headline was coded on the basis of (i) the occupation of the claimant, (ii) the award sum, (iii) the terminology used to refer to work-related stress, and (iv) lexical cohesion (i.e., the way in which words are connected into a coherent sequence).

6.6 Results

6.6.1 Article frequency

42 articles were identified. These are shown in Table 5.

<i>Newsprint title</i>	<i>Number of articles</i>
<i>Broadsheet titles</i>	
Financial Times	5
The Guardian	5
The Independent	5
The Daily Telegraph	14
The Times	0
<i>Tabloid titles</i>	
Daily Mail	5
News of the World	1
The Mirror	0
The Sun	7

Table 5. Frequency, by title, of reports on personal injury claims for work-related stress in the British daily newsprint media (1 January 1996 to 8 February 2007).

The number of germane articles was substantially greater in the broadsheet newsprint titles (n=29) than the tabloid newsprint titles (n=13). Articles were not spread evenly across titles within the two categories of newsprint titles. 48% of the articles that appeared in broadsheet titles were from the Daily Telegraph. Two titles dominated in the tabloid category: 54% of articles appeared in The Sun and 38% appeared in the Daily Mail. One title in each category did not print any germane articles: The Times (broadsheet) and the Mirror (tabloid).

6.6.2 Themes

The dominant theme in article headlines was the repeated use of the word *stress* to refer to the type of claim. For example: "Judges issue warning over stress payouts to workers" (Independent, 6 February 2002); "Work stress ruined my marriage claims trader" (Daily Telegraph, 28 April 2004). 86% of article headlines (n=36) included the word *stress* or a derivative such as *stressed-out*. Article themes are shown in Table 6.

Twenty four of the article headlines (60%) stated the financial sums involved in awards of compensation or out of court settlements. Tabloid articles were more likely to state financial sums than their broadsheet counterparts: 69% (n=9) of the tabloid articles mentioned financial sums compared to 51% (n=15) of the broadsheet articles. The likelihood of mention being made of an award or settlement was unrelated to its size: relatively small sums were highlighted "Teacher is awarded £47,000 for school stress" (Daily Telegraph, 1 October 1999) as were larger sums "Teacher receives record £254,000 payout for stress" (Daily Telegraph, 5 December 2000).

Twenty two headlines (52%) noted the occupation of the claimant in either specific terms such as 'teacher' or in broader terms such as 'manager'. 15 of these headlines (68%) pertained to claims from public sector employees.

Date	Headline	Newsprint title	Title category
8 February 2007	Analyst's payout for stress at work upheld by Court of Appeal	Financial Times	Broadsheet
29 April 2004	Stress-case City trader agrees settlement with Commerzbank	Financial Times	Broadsheet
28 April 2004	Work stress ruined my marriage claims trader	Daily Telegraph	Broadsheet
27 April 2004	Stressed trader lost bank £4m by going home early	Daily Telegraph	Broadsheet
2 April 2004	Stress case appeal overturned by Lords	Financial Times	Broadsheet
2 April 2004	Lords limit liability for stress at work	The Guardian	Broadsheet
8 February 2004	Damages for overworked lecturer	Daily Mail	Tabloid
8 March 2002	Don't bang on a bung if you're stressed-out	The Sun	Tabloid
11 February 2002	Companies and staff gain from a ruling that offers a checklist on liability	Financial Times	Broadsheet
6 February 2002	Appeal court overturns stress-at-work payouts: Employee awards reversed on grounds that harm must be 'reasonably foreseeable'	Financial Times	Broadsheet
6 February 2002	Judges issue warning over stress payouts to workers	The Independent	Broadsheet
6 February 2002	Judges curb stress cases	The Guardian	Broadsheet
6 February 2002	£200,000 payouts for stress KOd	The Sun	Tabloid

6 February 2002	Judges tighten rules on stress payouts	Daily Telegraph	Broadsheet
6 February 2002	Four cases at centre of ruling on stress	Daily Telegraph	Broadsheet
27 October 2001	Child abuse officer forced out by stress awarded £135,000	Daily Mail	Tabloid
5 September 2001	£140,000 payout for woman made sick with stress	Daily Telegraph	Broadsheet
5 September 2001	Social worker given £140,000 for 'stress'	The Independent	Broadsheet
5 September 2001	Care boss wins £140,00 after job stress 'ruined life'	The Sun	Tabloid
23 March 2001	Former Pc drops £400,000 stress claim against Met	Daily Telegraph	Broadsheet
22 March 2001	Police officer drops compensation claim	Daily Mail	Tabloid
9 March 2001	Bullied teacher wins £100,000 for stress caused by workload	The Guardian	Broadsheet
10 December 2000	Sex toy frolics of £250,000 teacher	News of the World	Tabloid
6 December 2000	Home stress of pay-out teacher	Daily Mail	Tabloid
5 December 2000	Teacher wins £250,000 over stress	Daily Mail	Tabloid
5 December 2000	Teacher receives record £254,000 payout for stress	Daily Telegraph	Broadsheet
5 December 2000	Teacher awarded £250,000 over stress illnesses	The Independent	Broadsheet
10 August 2000	Bank worker gets £100,000 stress payout	Daily Telegraph	Broadsheet
22 February 2000	Ex-manager wins £175,000 for stress	The Independent	Broadsheet
22 February 2000	Fury over £175,000 payout for job stress	The Sun	Tabloid

11 January 2000	£203,000 award for stress at gypsy site	The Guardian	Broadsheet
11 January 2000	Fury at gypsy's £203,000 stress payout	The Sun	Tabloid
11 January 2000	Gypsy site warden gets £203,432 for stress	Daily Telegraph	Broadsheet
11 January 2000	Record £203,000 payout for stress	The Independent	Broadsheet
1 October 1999	Teacher is awarded £47,000 for school stress	Daily Telegraph	Broadsheet
6 July 1999	Council pays £67,000 for stress injury	The Guardian	Broadsheet
6 July 1999	£67,000 for stress of 18hr a week job	The Sun	Tabloid
6 July 1999	Woman awarded £67,000 for work-related stress	Daily Telegraph	Broadsheet
26 June 1999	Work stress ruined my life, says mother	Daily Telegraph	Broadsheet
9 May 1998	Ex Detective wins claim for 'years of stress'	Daily Telegraph	Broadsheet
29 April 1996	Social worker wins £175,000 over job stress	Daily Telegraph	Broadsheet
27 April 1996	£175,000 for victim of stress	The Sun	Tabloid

Table 6. Headlines from reports on personal injury actions for work-related stress in the British daily newsprint media (1 January 1996 to 8 February 2007).

6.6.3 Lexical cohesion

Evidence was found of several forms of lexical cohesion between words that described the claimant and the sum of compensation. This is shown in Table 7. Six dominant terms were evident: *payout*, *given*, *wins*, *receives*, *awarded*, *gets*. Few discernable differences were evident between the broadsheet and tabloid articles in respect of lexical cohesion. Both categories of title used the term *payout* and *wins* in approximately equal measure. Differences were evident for the terms *awarded* and *gets* which were more often used by the broadsheet than the tabloid press.

Date	Headline	Newsprint title	Title Category
8 February 2007	Analyst's payout for stress at work upheld by Court of Appeal	Financial Times	Broadsheet
6 February 2002	Judges issue warning over stress payouts to workers	The Independent	Broadsheet
6 February 2002	£200,000 payouts for stress KOd	The Sun	Tabloid
6 February 2002	Judges tighten rules on stress payouts	Daily Telegraph	Broadsheet
27 October 2001	Child abuse officer forced out by stress awarded £135,000	Daily Mail	Tabloid
5 September 2001	£140,000 payout for woman made sick with stress	Daily Telegraph	Broadsheet
5 September 2001	Social worker given £140,000 for 'stress'	The Independent	Broadsheet
5 September 2001	Care boss wins £140,00 after job stress 'ruined life'	The Sun	Tabloid
9 March 2001	Bullied teacher wins £100,000 for stress caused by workload	The Guardian	Broadsheet
6 December 2000	Home stress of pay-out teacher	Daily Mail	Tabloid
5 December 2000	Teacher wins £250,000 over stress	Daily Mail	Tabloid

5 December 2000	Teacher receives record £254,000 payout for stress	Daily Telegraph	Broadsheet
5 December 2000	Teacher awarded £250,000 over stress illnesses	The Independent	Broadsheet
10 August 2000	Bank worker gets £100,000 stress payout	Daily Telegraph	Broadsheet
22 February 2000	Ex-manager wins £175,000 for stress	The Independent	Broadsheet
22 February 2000	Fury over £175,000 payout for job stress	The Sun	Tabloid
11 January 2000	£203,000 award for stress at gypsy site	The Guardian	Broadsheet
11 January 2000	Fury at gypsy's £203,000 stress payout	The Sun	Tabloid
11 January 2000	Gypsy site warden gets £203,432 for stress	Daily Telegraph	Broadsheet
11 January 2000	Record £203,000 payout for stress	The Independent	Broadsheet
1 October 1999	Teacher is awarded £47,000 for school stress	Daily Telegraph	Broadsheet
6 July 1999	Council pays £67,000 for stress injury	The Guardian	Broadsheet
6 July 1999	Woman awarded £67,000 for work-related stress	Daily Telegraph	Broadsheet
9 May 1998	Ex Detective wins claim for 'years of stress'	Daily Telegraph	Broadsheet
29 April 1996	Social worker wins £175,000 over job stress	Daily Telegraph	Broadsheet

Table 7. Lexical cohesion in headlines of articles relating to personal injury claims for work-related stress in British daily newsprint media (1 January 1996 to 8 February 2007).

6.6.4 Stakeholder voices

Table 8 shows the frequency with which quotations attributed to stakeholders appeared in articles. Across the articles, parity was evident between claimants and defendants in terms of the frequency with which their voices could be heard: 14 articles quoted the claimant whereas 16 articles quoted the defendant. Differences were evident, however, at the title category level: tabloid articles were more likely to express the voice of the defendant employer whereas broadsheet articles offered equal coverage to both employer and claimant.

Stakeholder	Frequency (broadsheet)	Frequency (tabloid)
Claimant	11	3
Defendant	10	6
Defendant's lawyer	0	0
Claimant's lawyer	4	4
Lawyer unrelated to trial	1	0
Trades unions	14	6
Occupational health psychologists and allied professionals	2	0
Employers' representative groups	3	1
Other	0	5

Table 8. Stakeholder voices in British daily broadsheet newsprint reports on personal injury claims for work-related stress (1 January 1996 to 8 February 2007).

Claimants' statements were of three general types: descriptions of the symptoms of work-related stress "...I found it difficult to switch from one problem or situation to another. My concentration fluctuated and I suffered sleepless nights. It was like a downward spiral" (Daily Telegraph, 6 July 1999); expressions of personal relief and exoneration "I feel vindicated and happy with this result" (Guardian, 2 April 2004); and expressions of gratitude that an important issue had been put under the spotlight "I feel a sense of satisfaction that an important issue has been brought to the fore. Stress is something which is increasing in many areas of work and both employers and employees need to be aware of its implications" (Daily Telegraph, 29 April 1996).

The voice of the defendant was commonly expressed in the final paragraph of the article and usually consisted of either of two forms of statement: reassurance to employees and the public that work-related stress was taken seriously by the organisation "These are the only successful stress claims against the council which show we are doing all we can to support staff...the new county council has improved procedures..." (The Guardian, 11 January 2000); or conciliatory messages to the claimant "The council has every sympathy...and wishes him well" (Daily Telegraph, 29 April 1996).

Trades unions were the most strongly represented stakeholder group in terms of the number of attributed quotations (n=20). This finding was consistent with that of Lewig & Dollard's (2001) analysis of the representation of work-related stress in the Australian newsprint media. Trades unions often took the opportunity to warn that they would not hesitate to take up similar cases in the future "We will make sure our members know the Court of Appeal has urged

them not to suffer in silence..." (The Guardian, 6 February 2002) and noted that successful claims should act as a warning to employers to take seriously the problem of work-related stress "When we meet employers to discuss these matters I believe they will now treat us much more seriously" (Daily Telegraph, 29 April 1996).

Trades unions offered some interpretation of judgments for the purpose of providing guidance on the management of work-related stress: "The outcome shows very clearly that employers can no longer just ignore stress issues. They have to look after workers' physical health, but have a responsibility to look after their mental health as well" (Daily Telegraph, 29 April 1996). Overall, however, the trades unions cut a lonely voice in their repeated suggestion across the articles that "It is important that employers learn from these cases..." (Daily Telegraph, 5 September 2001). Broadsheet articles were more likely to express the voice of trades unions than tabloid articles (n=14 and 6 respectively).

Employer representative groups were quoted in four articles. In all cases, the employer representative groups noted that they took comfort from the judgement which was perceived to make it harder for employees to pursue future actions.

Lawyers representing the claimant were quoted in eight articles whereas those for the defendant were not represented in a single article. Comments from the claimant's legal representatives typically offered a reminder to employers that the law takes seriously work-related stress. For example, "This case should be seen as a signal to employees that when a worker shows signs of stress the

employer is obliged to attempt to reduce the burden" (The Independent, 22 February 2000).

The tabloid press uniquely offered voice to a range of interested parties who, in virtually every case, lambasted the findings of the court in claims that had been found in favour of the claimant. Examples included a representative of the Victims of Crime Trust (The Sun, 22 February 2000) and a relative of a victim of a school-yard stabbing (The Sun, 11 January 2000). Both complained about the perceived unfairness of the availability of vast sums in compensation for psychological injury as compared to lesser sums awarded for physical injury and death where it arises as a result of the negligence of others.

The voice of the applied psychologist or professional from the allied disciplines was rarely evident (n=2). A single article quoted a professor of organisational psychology who commented on the rise in stress in particular professions and a professor of education who likewise discussed the growth of stress in teaching (The Independent, 5 December 2000).

6.7 Discussion

The study described in this chapter concerned an investigation into the representation of personal injury claims for work-related stress in British daily newsprint titles. The study set out to address three questions. First, is the British newsprint media an important source of information concerning personal injury litigation for work-related stress? Second, do media representations of personal injury claims for work-related stress in the British newsprint media

possess particular characteristics? Third, what implications for activities directed at tackling and defining work-related stress might arise out of these representations?

42 germane articles were identified. The number of articles was greater in broadsheet than tabloid titles. Two titles (one broadsheet and one tabloid) accounted for 50% of the articles. There was no obvious pattern or basis for the reporting of claims; some legally important claims such as *Hatton v Sutherland* [2002] received considerable coverage (eight articles) whereas others such as the House of Lords judgment in *Barber v Somerset County Council* [2004] did not (two articles). It might be concluded from the evidence that the likelihood of a claim being reported may depend more on factors beyond legal importance or value in terms of implications for policy and practice on the management of work-related stress.

6.7.1 Representations, discourses and stakeholder actions on tackling work-related stress

Critical discourse analysis allowed for the discernment of a set of dominant themes at the headline level. First, the word *stress* appeared in the majority of headlines. This was noteworthy since, technically, the claims concerned psychiatric injury arising out of work; *stress* being merely a handy moniker applied by journalists or those involved in the litigation process. Second, frequent reference was made to the occupation of the claimant who in many cases was a public sector worker. Third, frequent reference was made to the financial sums involved in awards or out of court settlements. These findings were consistent with the results of a previous study which had found that

Australian newsprint articles on work-related stress tended to focus on the financial costs of the problem and represented the issue as one largely restricted to the public sector (Lewig & Dollard, 2001).

The representation of personal injury litigation as financially costly to organisations and largely a public sector problem provides some indication of the importance assigned to these factors by newspaper editors and headline writers. It is also notable that these representations are likely to be interpreted by readers in negative terms: they do not offer a positive message for those tasked with the management of work-related stress. Indeed, newspapers often demonstrate a preference for negative stories and simplified versions of complex events that allow outcomes to be highlighted (Fowler, 1991). Social constructionist theory holds that the discourse associated with the placement of particular themes at the headline level may contribute to shaping beliefs and actions associated with the event represented within those headlines. Within the social constructionist theoretical framework, these findings point to the possibility that the representation of personal injury litigation for work-related stress in the British newsprint media may be one factor, among others, that contributes to motivating stakeholders to take action on work-related stress. This may help to explain why subject-matter experts in the study described in chapter 3 (i) identified the personal injury case definition for work-related stress as central to influencing stakeholder actions on tackling work-related stress and (ii) expressed desire for consistency between this case definition and that developed for use in large-scale nationally representative workforce surveys.

6.7.2 Implications for practitioners

Critical discourse analysis was also shown to be an effective tool for the identification of stakeholder voices within articles and the nature of their messages. Two key findings emerged in this respect. First, virtually all of the articles failed to introduce guidance into their reports on lessons that might have been learned from the circumstances of individual claims in respect of the management of work-related stress. The articles appeared to ignore the opportunity to locate reports on claim outcomes within an interventionist context. Second, the voice of the occupational health psychologist, as well as that of other appropriately qualified professionals who might be considered experts on the causes, nature, consequences and management of work-related stress, was almost entirely absent from the articles. Such professionals would be well placed to offer guidance on empirically validated approaches to the management of stress as well as opinion on what the employer in the specific claim being reported might have done to prevent the injury.

These findings highlight the potential scope that exists for occupational health psychologists and associated professionals to collaborate with journalists to ensure that reports on personal injury claims locate their subject matter within an interventionist framework that promotes preventative activities for the management of work-related stress. The fact that occupational health psychologists appear not to have engaged with journalists in the context of newsprint reports on personal injury claims for work-related stress raises questions about the barriers to collaboration that may exist. Furthermore, it raises the question of whether media training ought to be a core element in the professional preparation of occupational health psychologists. Indeed, one

survey of occupational health psychologists showed that educating society about the risks of work-related stress and approaches to its management is perceived by practitioners to be a core component of their work (Arthur, 2002b). As such, providers of occupational health psychology education might be well advised to introduce training components to empower future practitioners to collaborate with the media towards the fulfilment of this core component of professional practice.

6.7.3 Limitations and further research

The study described here had some limitations that highlight opportunities for further investigation. In recognition of the exploratory nature of research in this field, the analysis centred on the textual representation of personal injury litigation in the newsprint media. This constituted a first step in a programme of research designed to develop our understanding of the role of the media in shaping stakeholder activities on work-related stress. That understanding could be further developed through critical discourse analysis beyond the textual level, i.e., at the level of how text is received, interpreted and acted upon by audiences. Such research would permit conclusions to be drawn on questions concerning the degree to which media representations of work-related stress contribute to informing stakeholder activities on work-related stress and the manner in which this may operate.

The representations examined in the current study are located within particular socio-economic, political and cultural climates that are constantly evolving. As these climates change, representations are also likely to develop. Longitudinal research could usefully track these changes and assess their influence on the

public discourse surrounding the management of work-related stress. Research on trade and professional publications read by organisational decision makers could also be of value; the representations present in such publications may play an important role in shaping organisational activities.

The lack of voice given to occupational health psychologists in newsprint reports of personal injury claims for work-related stress raises questions about the barriers that may exist to collaboration between occupational health psychologists and the media. Value could be found in studies that sought to examine (i) perceptions of barriers to collaborative activities and (ii) strategies to improve collaboration with a view towards the production of guidance for both parties on the development of productive professional relationships.

6.8 Conclusions

Researchers from a variety of disciplines have begun to take an interest in the analysis of media discourses in response to a growing appreciation of the ways in which media representations of events may have an impact on decisions and actions (Abrahamson, 1991, 1996; Riffe, Lacy & Fico, 2005). This study has demonstrated the value to be found in the application of content analysis methodologies to the examination of newsprint reports on personal injury litigation. The critical discourse analysis methodology was found to be efficacious for the identification of key features of the newsprint representations of litigation. It is possible that the characteristics of the representations may be responsible, along with other factors, for focusing stakeholder attention on the personal injury case definition. In this way, the representations may also help to

explain why subject-matter experts in the study described in chapter 3 identified the personal injury case definition as key to informing their activities on work-related stress. The critical discourse analysis methodology was furthermore shown to be effective for the identification of stakeholder voices that were evident in the articles and the messages conveyed by those voices. The articles largely failed to introduce guidance on preventative activities for the management of work-related stress into reports on claim outcomes. In addition, the voice of the occupational health psychologist, who would be well-placed to supply empirically validated guidance, was almost entirely absent. Scope was identified for occupational health psychologists to collaborate with journalists to ensure that reports on personal injury litigation locate their subject matter within a preventative context of activities on the proactive management of work-related stress.

7. CONCLUSIONS AND FUTURE DIRECTIONS

This final chapter brings together the results and conclusions from those that precede it and examines these in the context of a wider debate on the relationship between research, policy and practice on work-related stress. Future directions in the development of research on case definitions for work-related stress are discussed. The chapter concludes by summarising the main findings of the thesis.

7.1 Tension between theory and practice

Several of the studies presented in this thesis have drawn attention to apparent shortcomings in respect of the interplay between science and practice. In chapter 2 it was shown that considerable scientific advances have been witnessed in recent decades on the development of knowledge and understanding of the nature, causes and consequences of work-related stress. However, it was also shown that such developments have generally failed to permeate into the applied context where they might have usefully informed the design of case definitions for work-related stress used in large-scale nationally representative workforce surveys in Britain.

The pragmatic need for a concise case definition that lends itself to expedient administration and assessment in the survey domain might often, it appears, override the imperative presented by scientific research findings for theoretically and empirically supported approaches that are invariably more complex. It is

understandable that practitioners might prefer simplistic case definitions. However, survey designers tempted to take the 'easy road' might do well to consider the implications of doing so. The results of large-scale nationally representative workforce surveys are used to inform policy and to measure progress towards national improvement targets for work-related stress; in view of this fact, the case definitions used as the basis for measurement must be valid and reliable. To put it simply, meaning and value in what is being measured ought not to be traded off for convenience.

In light of the identified theoretical shortcomings of the case definitions for work-related stress used in large-scale nationally representative workforce surveys in Britain, chapter 3 presented a study that described the development of a new case definition for use in this context. The study was commissioned and funded by the Health and Safety Executive. The primary driver behind the commission was the need for a new case definition that was (i) theory-based and (ii) deemed fit for purpose across stakeholder groups. It was held that a case definition replete with these features would provide improved estimates of the scale of work-related stress in the nation's workforce. In this way the case definition would facilitate measurement of progress towards national improvement targets. A multi-factorial case definition was developed that was consistent with transactional stress theory. Some study participants observed that the multi-factorial nature of the case definition might present a potential barrier to its adoption in practice. Indeed, this proved to be so. It is a matter of scientific regret that the case definition has yet to be adopted by survey designers for use in large-scale surveys. However, this is not entirely surprising given the length of an assessment schedule that would be required to measure work-related stress in accordance with the case definition, and the time it would

take to administer such an assessment. Despite the problems surrounding multi-factorial case definitions, it can be argued that their theoretical basis renders them superior to the convenient but theoretically unsupported single-item case definition that asks respondents to consider 'In general, how do you find your job?' (responses given on a five-point scale from 'not at all stressful' to 'extremely stressful'). It appears that, for many survey designers, the user-friendly nature of a direct single-item measure can be a more powerful driver of case definition choice than adherence to contemporary stress theory and stakeholder agreement on the acceptability of a case definition.

It remains to be seen whether future large-scale surveys on work-related stress in Britain will continue the trend established by several of the Health and Safety Executive-commissioned surveys for preference for single-item case definitions over those that offer a theoretically-supported foundation. Should the single-item approach continue to win favour with survey designers, it is imperative that occupational health psychologists apply themselves to investigations into its ability to predict individual and organisational health outcomes associated with work-related stress. The availability of scientific evidence to demonstrate the validity and reliability of the single-item approach may be an important prerequisite for the development of consensus among stakeholders on the acceptability of survey-based estimates of the scale of work-related stress generated using such an approach to measurement.

One of the key findings of the study presented in chapter 3 concerned the importance afforded by stakeholders to the personal injury case definition for work-related stress. Study participants identified this case definition as crucial to informing stakeholder activities on work-related stress. Furthermore, desire was

expressed for consistency, insofar as it might be possible, between this case definition and that developed for use in future large-scale nationally representative workforce surveys. Several participants also noted problems associated with the structure, interpretation and application of the personal injury case definition for work-related stress and calls were evident for its reform. These findings stimulated the studies presented in chapters 4 and 5, the latter of which concerned a detailed examination of problematic issues associated with the personal injury case definition for work-related stress. The study revealed that the neglect of contemporary psychological stress theory in the design of case definitions extends into the personal injury legal domain. The personal injury case definition for work-related stress is ostensibly psycho-legal in nature in that it requires evidence of both psychological and legal factors. However, the study showed that in the development of the case definition, psychological factors have generally been considered of lesser importance than legal principles and the courts have generally been reluctant to embrace contemporary scientific knowledge on work-related stress. These findings highlighted the imperative for occupational health psychologists to identify opportunities for the application of scientific theory and evidence to the development of case definitions in applied contexts where knowledge from the social sciences may traditionally have been overlooked.

The study described in chapter 6 examined one of the possible sources of the science-practice divide in respect of case definitions for work-related stress. The study revealed that the media representation of personal injury litigation for work-related stress, and the case definition used therein, may contribute to the construction of a misleading and uninformed public discourse in respect of the same. The findings highlighted the need for occupational health psychologists to

develop constructive working relationships with the media towards the promotion of a balanced and accurate representation of case definitions for work-related stress. In this way, the opportunity may exist to contextualise media reports of personal injury claims (as well as reports on work-related stress more generally) in a preventative interventionist context that contributes to the bridging of the science-practice gap.

Together, these studies have highlighted a challenge that faces work-related stress researchers: that of how to ensure the integration, at the design stage, of scientific knowledge into case definitions used in the applied context or, where a case definition already exists in a particular domain, how to ensure that scientific knowledge informs its gradual development or radical reform. It is suggested that for progress to be achieved in this regard, work-related stress researchers would do well to first develop consensus on a theoretical model of the construct and a standardised approach to its measurement.

However, the development of new theoretical conceptualisations and case definitions for work-related stress may be hindered by the nature of academic reward systems that encourage scholars to study issues in a conformist manner (Ferris, Bowen, Treadway, Hochwarter, Hall & Perrewe, 2006). Indeed, it has been suggested that journal editors may actively show preference to studies that employ well-used conceptualisations of work-related stress, irrespective of their theoretical adequacy, on the basis that they are acting in the best interests of the field by taking an 'intellectually conservative approach' (ibid). As such, it will be difficult, no doubt, for work-related stress researchers to develop, in concert, a unified approach to the study of the phenomena. As Ferris and colleagues have observed, "role models tend to be conventional approaches that

have been used and rewarded in the past, and non-linear thinking typically does not constitute conventionality" (ibid, p. 206). Nevertheless, such endeavours are necessary if the gap between contemporary research and practice on work-related stress is to be bridged.

7.2 Future directions in research, policy and practice

In the British context, a number of policy imperatives exist that have a direct influence on research activities associated with the development of case definitions for work-related stress. A selection was discussed in chapter 1 that emanated from the government's strategy statement on Revitalising Health and Safety (Department of the Environment, Transport and the Regions, 2000) and associated statement on Securing Health Together (Health and Safety Commission, 2000). These paved the way for a raft of national initiatives targeted at the promotion of mental health at work. The government's commitment to such was latterly reinforced in October 2007 when Dame Carol Black, on behalf of the government, issued a national call for evidence on the relationship between work and health (with a particular focus on mental health) as part of the Health, Work and Well-being strategy (Black, 2008).

The sustained focus of the British government on occupational health issues can be taken as an indication that policy imperatives will continue to arise that have a bearing on the need for scientific research on work-related stress and, by extension, on the development of case definitions for work-related stress. Among these, three areas in particular can be identified that have been touched upon briefly earlier in this thesis. These are discussed below.

7.2.1 Organisational stress management activities

Since 2004, activities of the British Health and Safety Executive directed at the achievement of the *Revitalising Health and Safety* strategy national improvement targets on the incidence of work-related stress and number of days lost to the same have been channelled through the Management Standards for Work-Related Stress initiative (Mackay et al., 2004; Cousins et al., 2004). As described elsewhere in this thesis, the Management Standards consist of statements of good practice on common sources of work-related stress and a procedural 'toolkit' for the assessment and reduction of exposure to these. Their successful application in organisations and demonstrated ability to contribute to the improvement of both individual and organisational health has led the Health and Safety Executive to herald the initiative a success (see <http://www.hse.gov.uk/stress/standards/index.htm>). On this basis it might be anticipated that the Management Standards will form the basis of future government initiatives on tackling work-related stress.

Despite its demonstrated efficacy for the identification of risk at the group level, the Management Standards approach has been criticised for its inability to permit case assessments at the level of the individual worker. Although not designed to facilitate individual case assessments, it has been suggested that there will be occasions where such is required; for example, when it is desirable to identify individuals who might benefit from the palliative management of harm (Price, 2006). In this way, the absence of a strategy for the identification and management of individual cases of work-related stress within the Management Standards approach has been noted as a shortcoming (ibid).

Others have similarly warned of the risks in overlooking the individual level of analysis in respect of the management of common mental health problems at work (Seymour & Grove, 2005).

Perhaps in response to these criticisms, the Health and Safety Executive has suggested that, going forward, the 35-item Management Standards Indicator Tool survey instrument that was designed to assess self-reported exposures to seven categories of psychosocial hazard (demand, control, peer support, managerial support, relationships, role and change) might also be used as a case definition for work-related stress at the individual level (Edwards, Webster, Van Laar & Easton, 2008). The suggestion that the Indicator Tool might be used as “a multidimensional measure of work-related stress...[that]...would allow employers to calculate a global measure of stress based on average scores across the seven subscales...[and]...use the results from the Indicator Tool to calculate individual scores for the seven subscales as well as a single overall score of general work-related stress” (ibid, p. 98) has substantial theoretical and practical implications. To suggest that it might be acceptable for a case definition to be based solely on the presentation of evidence of psychosocial hazard exposures without reference to evidence of associated harms to individual or organisational health disregards the transactional theoretical perspective that conceives of a stress process with a focus on the dynamic transaction between an individual and the work environment. Indeed, it disregards all modern theoretical notions of work-related stress. Moreover, it waits to be seen how stakeholders (especially employers and employees) will react to the overt support of the Health and Safety Executive for such an approach to the use of case definitions within organisations. It would be a matter of regret if the advocacy of a uni-dimensional and overly-simplistic

perspective on the identification of cases of work-related stress were to damage the hard won reputation of the construct as one that is meaningful and genuine with potentially debilitating sequela. In view of these problems, further research is required on the translation of the Management Standards approach into a usable and theoretically-founded case definition for use within organisations.

In sum, the evidence, though limited owing to the relatively recent advent of the Management Standards approach, suggests that an imperative exists for the development of case definitions for work-related stress that are receptive to translation into practicable assessment tools for application at the individual level in the workplace while remaining consistent with the Management Standards approach and contemporary transactional stress theory.

7.2.2 The role of the general practitioner in tackling work-related stress

In recent years, general practitioners have reported an increase in the number of patient presentations for symptoms of work-related stress (Mowlam & Lewis, 2005; Norwich Union Healthcare, 2005). The growing involvement of general practitioners in dealing with work-related stress in patients appears, however, not to have been followed by knowledge developments concerning the case definitions that general practitioners use to understand and identify work-related stress as well as how they regard their role in its management. The existing research on how general practitioners deal with work-related stress in patients has tended to have its focus on the function of the general practitioner within the context of country-specific industrial injury or workers' compensation schemes (e.g., Russell & Roach, 2001, 2002).

In view of the growing number of presentations to general practitioners for work-related stress and the role that general practitioners may play in its amelioration, a comprehensive programme of research is advocated to examine (i) the conceptual understanding of work-related stress held by general practitioners, (ii) the case definitions for work-related stress used by general practitioners for its identification, (iii) the role of general practitioners in giving advice on modifications to the psychosocial work environment that may help to control and reduce symptoms of work-related stress, and (iv) training and guidance needs in respect of each of the aforementioned points. Each of these is considered briefly below.

General practitioners' conceptual understanding of work-related stress

To understand the approaches of general practitioners to dealing with work-related stress in patients it is first necessary to know what general practitioners conceptually understand by work-related stress in terms of its causes, nature and consequences. The understanding of general practitioners on mental health problems has been shown to influence approaches to treatment and views on the degree to which they should and could usefully assist patients (Dowrick, Gask, Perry, Dixon & Usherwood, 2000; Gask, Dixon, May & Dowrick, 2005). Evidence exists to show that lay people vary in their understandings of work-related stress (Furnham, 1997; Kinman & Jones, 2005) but there remains a paucity of research on how general practitioners' understandings might relate to their approaches to dealing with the problem.

Case definitions for work-related stress used by general practitioners

There is no agreed case definition for the diagnosis of any clinical syndrome of 'stress'. This situation leads to uncertainty about the relationship between psychosocial hazard exposures and symptoms of ill health (Waddell & Burton, 2006). That uncertainty extends into primary care. Australian research has shown variability in the approach of general practitioners to establishing the stress- and work-relatedness of an illness (Russell & Roach, 2001). Dutch research has similarly revealed the failure of general practitioners to use standardised case definitions of mental health and its attribution to work to be a barrier to reliable diagnosis (Anema et al., 2006). In that study, interviews with the general practitioner and occupational physician of 26 workers showed that in less than half the cases could agreement be found on diagnosis of illness and more often than not there was disagreement on cause. Little comparative data exists for Britain. There is some evidence to suggest that general practitioners in Britain display variability in their approaches to the diagnosis of common mental disorders that are not specifically stress-related (Lucas, Scammell & Hagelskamp, 2005) and to the assessment of the work-relatedness of those disorders (ibid; Mowlam & Lewis, 2005). However, it remains unclear how general practitioners in Britain judge whether stress has a role in the aetiology of a problem and whether stress is work-related. The degree to which guidance on case definitions is available, disseminated and used is also unclear.

Advice on work modifications

General practitioners are often the first point of contact for health problems and their advice and guidance is usually trusted by patients. Thus, they are well

placed to offer advice on return to work issues (Faculty of Occupational Medicine, 2005). Broadly defined, return to work issues include sickness certification, judgements on fitness for work and the making of recommendations on modifications to work design, management and organisation that may facilitate a sustained return to work.

General practitioners vary in their beliefs concerning their obligation and ability to deal with return to work issues in general terms (Mowlam & Lewis, 2005; Norwich Union Healthcare, 2005). However, there is a paucity of research that is specific to work-related stress. There is some evidence to suggest that general practitioners may be reluctant to become involved in return to work issues in respect of work-related stress for fear that litigation might arise if accident or injury were to occur (Mowlam & Lewis, 2005) or if recommended modifications to the workplace psychosocial environment should prove unsuccessful.

Empirical research findings support the contention that general practitioners may be ill-equipped to provide recommendations on modifications to the psychosocial work environment that may contribute to the control and reduction of symptoms of work-related stress. Indeed, this is a difficult area in view of what Glozier (2002) has referred to as the absence of a 'psychiatric wheelchair ramp' which makes it difficult to predict which modifications might be effective. One British survey of general practitioners (n=1,500) found that 64% were unaware that work can be beneficial for mental health; 90% of whom reported that if they were made aware of such evidence they would alter the advice given to patients (Department for Work and Pensions, 2007). Dutch research has

similarly revealed that workers absent from work owing to mental health problems and who visited their general practitioner were more likely to receive medical interventions such as referral or drug prescription rather than advice on psychosocial work environment modifications. In the study of 555 sick-listed workers, questions on working conditions were rarely posed by general practitioners and work-related interventions were never applied (Anema et al., 2006). The evidence from court judgments from personal injury claims for work-related stress considered in chapter 5 likewise revealed something of the difficulty faced by general practitioners in making recommendations on psychosocial work environment modifications. In most judgments, where the advice of a general practitioner could be identified, advice was brief and centred on giving the patient 'light duties'.

Together, the evidence from case law and scientific studies points to the need for research to identify the nature of advice provided by general practitioners to patients and employers in respect of modifications to the psychosocial work environment. Should variance be found in advice given, or deficits evident in the nature of advice supplied (in terms of consistency with the empirical scientific literature), a case would present itself for the development of guidance for general practitioners.

Training and guidance

The difficulties faced by general practitioners in making recommendations on psychosocial work environment modifications for the control and reduction of symptoms of work-related stress in patients raises questions about the

adequacy of training, support and guidance that is available in this respect. It has been suggested that general practitioners would benefit from training on this issues through the Postgraduate Medical Education and Training Board (Bevan, Passmore & Mahdon, 2007). The Trades Union Congress (TUC) has similarly argued that:

"...Unfortunately many GPs will have no idea what job a person does or who they work for...In addition, most GPs, at present have little training or awareness of occupational medical issues. It is only recently that there has been any mention of occupational medicine within undergraduate medical training and even now it is woefully inadequate. In addition there is currently no occupational medicine element within the training of most GP registrars..." (Trades Union Congress, 2007, p. 1)

Overall, there appears to be a paucity of knowledge concerning how general practitioners (i) conceptualise work-related stress, (ii) operate case definitions to identify work-related stress in their patients, (iii) perceive and approach their role in advising patients and employers on modifications to the psychosocial work environment for the alleviation of symptoms of stress, and (iv) perceive their training needs in relation to each of these. A programme of research is advocated to address these shortcomings. The findings of such a research programme would likely inform the development of guidance for general practitioners on the operation of case definitions for work-related stress and the role of the general practitioner in making recommendations on modifications to patients' psychosocial work environments. This, in turn, would generate the need for further research to evaluate the impact of guidance with a view to the

development of initiatives to promote its adoption should low impact be demonstrated.

7.2.3 Industrial injury compensation

This thesis has restricted its examination of legal case definitions to that used in personal injury litigation. This focus was in response to the findings of the study described in chapter 3 which identified the personal injury case definition as being of particular importance to informing stakeholder activities on tackling work-related stress. However, it is also noteworthy that a number of participants in that study raised the question, during interview, of whether the development of a new case definition might have implications for case definitions elsewhere in the compensatory domain. In this regard, some participants discussed the possible introduction of incapacity benefits for work-related stress in Britain and the case definition that would be needed to allow for this within the Industrial Injuries Scheme (ISS).

The emergence of a debate on whether incapacity benefits ought to be available for work-related stress found impetus in a call for such from the Department of Social Security Medical Group (1998) and more recently in 2004 upon publication of the Industrial Injuries Advisory Council's (IIAC) report on this question. The IIAC, which advises the government on the prescription of occupational diseases, recommended that work-related stress ought not to be prescribed, while noting that "it recognises fully the importance of mental health problems as a source of morbidity nationally, and will continue to keep the topic under review" (IIAC, 2004, p. 11).

The IIAC identified three major impediments to prescription for work-related stress that centred on challenges in the development of a case definition. Each is discussed briefly below.

First, prescription requires the availability of accepted approaches to illness identification and expert consensus on the nature and range of health outcomes. The report observed that for most prescribed diseases diagnosis can be verified by direct clinical observation and tests; only in exceptional cases has prescription been permitted on the basis of self-reported symptoms alone where observable symptoms and tests prove inappropriate for diagnosis (e.g., vibration-induced white finger). It was held that for work-related stress, independent verification of self-reported symptoms would be difficult and resource intensive. Furthermore, the observation was made that in lay terms 'stress' is used to refer to a range of experiences that often do not lead to harmful or chronic ill-health and as such it cannot be described as a disease. It was also argued that even where objective verification of specific psychiatric illnesses may be possible, for disorders such as anxiety or depression the low level of agreement between experts on diagnosis renders expert opinion unreliable.

Second, prescription requires an accepted method for the identification of hazardous exposures. The IIAC noted that psychosocial hazards may be evident both in and out of the work context and that there is no agreement between experts on the best means to confirm exposure, define their time course and extent.

Third, prescription requires evidence for the attribution of an illness to work. Two forms of evidence may be considered: distinctive clinical features of the illness that point to work as the cause or, where that is insufficient, epidemiological evidence that would “allow attribution on the balance of possibilities (with at least a doubling of risk in defined occupational groups)” (IIAC, 2004, p. 4). In the case of work-related stress, the absence of particular clinical features in work-related psychological disorders (which are not evident in those same disorders when caused by exposures not related to work) forces the analysis to focus on epidemiological evidence. It was held that there is “no robust body of epidemiological evidence that satisfactorily demonstrated a doubling of risk in relation to specific occupations, such that it would be possible to say on the balance of probabilities that an individual case of a particular illness in a given occupation was due to their work” (IIAC, 2004, p. 5). The Council further noted that even if there were evidence of a doubling of risk for a particular stress-related disorder in an occupational group, other factors may confound the evidence, such as the possibility that individuals demonstrating certain personality types may be attracted to that occupational grouping.

In rejecting to notion of prescription for work-related stress the IIAC acknowledged that the issue ought to be kept under review. In the time that has elapsed since the IIAC collected evidence for its report, considerable developments have been witnessed in the scientific study of work-related stress. Not least among such developments is the introduction of the Health and Safety Executive Management Standards for Work-Related Stress (Cousins et al., 2004; Mackay et al., 2004). The advent of the standards might go some way to addressing the second of the IIAC’s aforementioned concerns: that of the absence of agreement between experts on the best means to confirm exposure,

define their time course and extent. Similarly, developments have been witnessed in tests of psychological work functioning as part of the national overhaul of the incapacity benefits system (that from the end of 2008 is to be known as Employee Support Allowance). It is arguable that developments such as these might permit reconsideration of the case for prescription for work-related stress.

It would appear, then, that a programme of research might be timely to explore the feasibility of the development of a case definition for work-related stress that would permit prescription for work-related stress. A multi-wave programme is recommended comprising the following steps:

1. an international policy review on the integration of work-related stress into industrial injuries benefits systems
2. state of the art reviews of the scientific evidence pertaining to each of the factors identified by the IIAC (2004) as presenting a barrier to prescription for work-related stress, namely:
 - a. expert consensus on accepted approaches to illness identification and on the nature and range of associated health outcomes
 - b. expert consensus on the acceptability of a single method for the identification of hazardous exposures
 - c. distinctive clinical features in stress-related illnesses that point to work as the cause

- d. epidemiological evidence that would allow attribution of illness to work on the balance of possibilities (with at least a doubling of risk in defined occupational groups)
3. The research described in Step 2 above would permit the identification of knowledge gaps and areas of expert disagreement (should they exist). Such gaps and disagreements would thus present themselves as objects for further research with a view to the rigorous assessment of whether it might be possible (and indeed desirable) to prescribe work-related stress as an industrial injury in the British context.

In sum, the programme of research advocated here would contribute usefully to the possible development of a case definition for work-related stress for use within the IIS.

7.3 Closing remarks

The research presented in this thesis was largely exploratory and represented a series of new avenues of scientific endeavour in occupational health psychology. The studies herein found their impetus in policy and practice imperatives as they relate to work-related stress. The thesis examined this topic area, which has formed the backbone of activity in occupational health psychology, in applied contexts that have received little focused attention from researchers within the discipline. In these ways, this thesis aspires to galvanise the linkages between policy, practice and research and extend the breadth of issues and contexts that the discipline of occupational health psychology might usefully address. To these

ends, the chapters have been written in a style designed to be inclusive and accessible to the interested lay reader. Choices concerning research design and data analysis have been guided by the same set of drivers as a means of avoiding the generation of research that might be referred to as 'gratuitously complex' (Anderson, 2007), whereby the by-product of the value placed on exclusivity among the scientific community is the inevitable disconnection of research from practice and policy formation.

The studies produced a range of findings conceptually linked by the notion of caseness in respect of work-related stress. The fundamental underlying messages to have emanated from these studies might be summarised in the following points.

First, the failure of large-scale nationally representative workforce surveys in Britain to incorporate standardised and theoretically-based case definitions for work-related stress is a shortcoming that has implications for the reliability and validity of the prevalence rates that they generate. The inconsistent estimates of the scale of the problem that these surveys produce make it difficult to assess progress towards national improvement targets for work-related stress and may hinder the efforts of government agencies to galvanise stakeholder action on tackling the issue.

Second, the systematic review was found to be an efficacious methodology for the identification of policy and research imperatives in respect of case definitions for work-related stress in the context of large-scale nationally representative workforce surveys in Britain.

Third, through the application of a qualitative template analysis methodology, it was possible to develop a theory-based multi-faceted case definition for work-

related stress. That case definition is replicated below (Figure 9). Subject-matter experts drawn from a range of stakeholder groups held the case definition to be suitable for use in future large-scale nationally representative workforce surveys. The use of the case definition in future surveys might facilitate the measurement of progress towards national improvement targets.

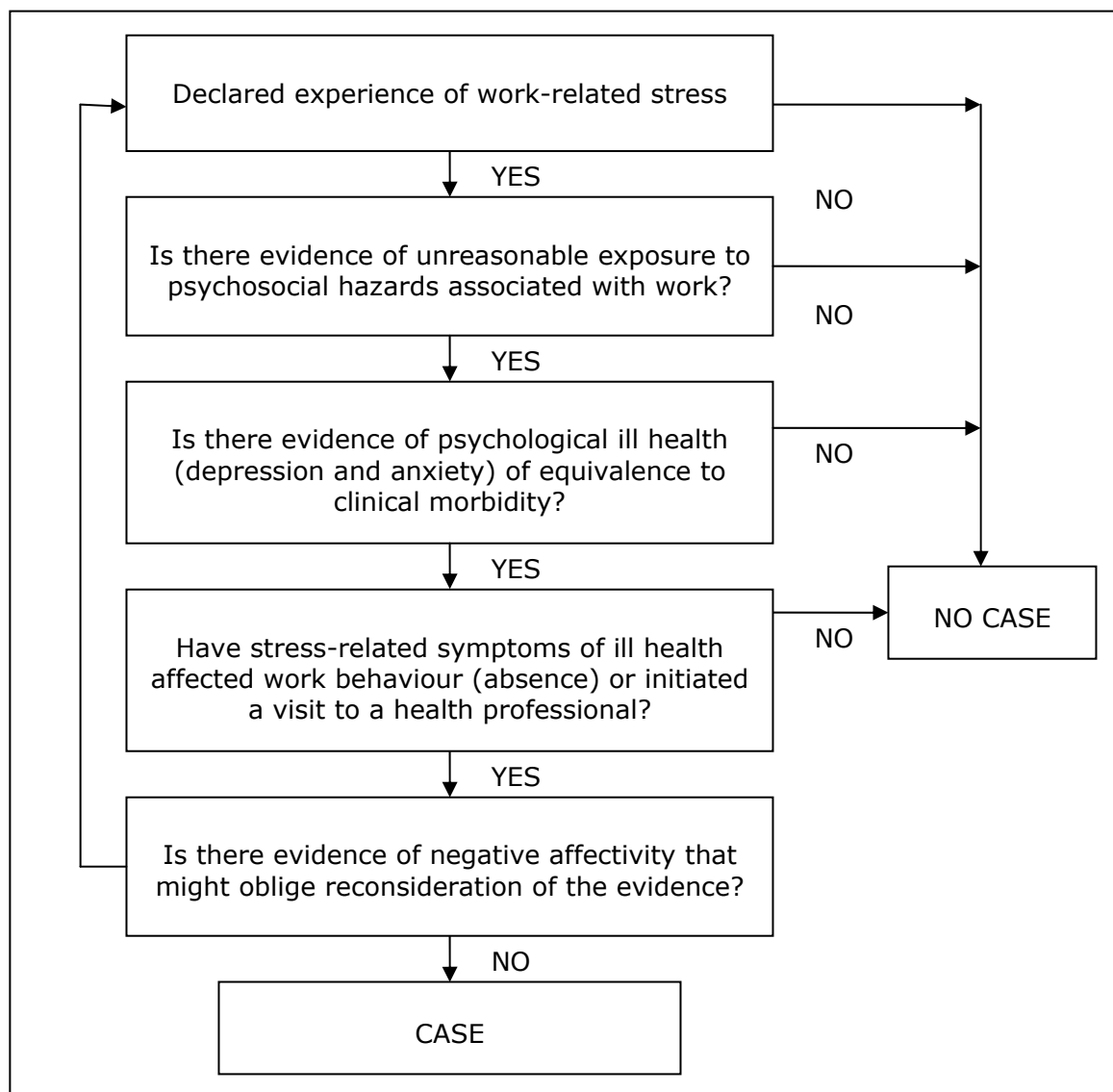


Figure 9: Framework to a case definition for work-related stress for large-scale workforce survey application

It is interesting to note that the case definition framework illustrated in Figure 9 has yet to be applied in a large-scale nationally representative workforce survey. One of the reasons for this is that the multi-factorial case definition, though scientifically robust and deemed fit for purpose across stakeholder groups, would inevitably translate into a lengthy and unwieldy survey instrument for which there might be little enthusiasm among survey respondents. Given the value placed on brevity in surveys by the Health and Safety Executive and other survey-commissioning bodies, it is perhaps not surprising that a preference for a single-item case definition for work-related stress can be identified among survey designers.

Although the case definition framework developed herein has not influenced policy and practice in a way that might have been anticipated, it has nevertheless informed national debate on the development of a statutory instrument for the control and prevention of work-related stress (Hamilton, 2008). The attributes of the case definition framework, especially its cross-stakeholder group appeal, relative ease of application and broad conceptual consistency with the personal injury case definition as it applies to work-related stress, have imbued it with a new and unanticipated purpose. Therefore, despite the case definition framework not having had its anticipated immediate impact on large-scale nationally representative workforce survey design, it appears that in coming years it may indeed have an influence on policy and practice on work-related stress in ways that could not have been predicted at the outset of the research.

Fourth, in the British context, stakeholders desired consistency, in so far as it might be possible, between the design of case definitions used in large-scale

surveys and that used in personal injury litigation for work-related stress. Substantial conceptual consistency could be found between the case definition developed herein for use in future large-scale surveys and the personal injury case definition for work-related stress. Consistency was less strong in respect of the approaches to data collection typically associated with these case definitions. Consistency might be enhanced through the reform of these case definitions.

Fifth, the personal injury case definition for work-related stress was identified by subject-matter experts drawn from key stakeholder groups to be problematic in respect of there being uncertainty surrounding its structure, interpretation and application. Calls were evident for its reform that might serve to enhance consistency with the case definition developed for use in large-scale nationally representative workforce surveys. Analysis of court judgments revealed a host of problems associated with the case definition for work-related stress used in personal injury litigation. The analysis revealed that scientific evidence from occupational health psychology and related disciplines has been neglected in the development of this psycho-legal case definition. Scope was identified for recommendations on its development that are informed by contemporary psychological theory and evidence. Such developments could enhance consistency with the case definition developed herein for use in large-scale nationally representative workforce surveys.

Sixth, the characteristics of newsprint representations of personal injury litigation for work-related stress might help explain the status of the personal injury case definition as a key influence in shaping stakeholder activities on work-related stress. Newsprint representations of personal injury litigation also revealed scope for collaboration between journalists and occupational health

psychologists with a view towards the contextualisation of reports of litigation within an interventionist framework of activities on the prevention and control of work-related stress.

Seventh, policy-related and practice-related research in occupational health psychology can benefit from the use of content analysis methodologies. The content analysis of court judgments was shown to be efficacious for the identification of problematic aspects of the case definition used in personal injury litigation for work-related stress, the detection of knowledge gaps and opportunities for the application of theory and empirical evidence from occupational health psychology to the shaping of policy and practice on work-related stress. Similarly, critical discourse analysis of newsprint reports of personal injury litigation for work-related stress was shown to be an effective method by which to examine representations that may influence beliefs and actions in an organisational context. Together, these two studies demonstrated scope for the further application of content analysis methodologies in occupational health psychology research.

Finally, it is the hope of the author that this thesis has contributed in a small way to paving the way for further necessary research on the development of case definitions for work-related stress. Such might be considered important for the advancement of research, policy and practice targeted at tackling the challenge to occupational health presented by work-related stress.

8. REFERENCES

Abrahamson, E. (1991). Managerial fads and fashions: The diffusion and rejection of innovations, *Academy of Management Review*, 16, 586-612.

Abrahamson, E. (1996). Management fashion, *Academy of Management Review*, 21, 254-85.

Adkins, J.A. (1999). Promoting organizational health: the evolving practice of occupational health psychology, *Professional Psychology: Research and Practice*, 30, 129-137.

Alavinia, S., van Duivenbooden, C. & Burdorf, A. (2007). Influence of work-related factors and individual characteristics on work ability among Dutch construction workers, *Scandinavian Journal of Work, Environment and Health*, 33, 351-357.

Allen, S. (2004). Personal injury law, *Law Society's Gazette*, 101, 28.

Almond, S. and Healey, A. (2003). Mental health and absence from work: New evidence from the UK Quarterly Labour Force Survey, *Work, Employment and Society*, 17, 731-742.

American Heritage Dictionary (2000). *American Heritage Dictionary of the English Language*, Boston: Houghton Mifflin.

American Psychiatric Association. (1994). *Diagnostic and Statistical Manual of Mental Disorders* (4th Ed.). Washington, DC: APA.

Anema, J., Jettinghoff, K., Houtman, I., Schoemaker, C., Buijs, P. & van den Berg, R. (2006). Medical care of employees' long-term sick listed due to mental health problems: A cohort study to describe and compare the care of the occupational physician and the general practitioner, *Journal of Occupational Rehabilitation*, 16, 41-52.

Anderson, N. (2007). The practitioner-researcher divide revisited: Strategic-level bridges and the roles of IWO psychologists, *Journal of Occupational and Organizational Psychology*, 80, 175-183.

Arthur, A. (2002a). Mental health problems and British workers: A survey of mental health problems in employees who receive counselling from Employee Assistance Programmes, *Stress and Health*, 18, 69-74.

Arthur, A. (2002b). Mental health care in the workplace – the need for an integrated approach, in C. Weikert, E. Torkelson & J. Pryce (Eds.), *Occupational Health Psychology: Empowerment, Participation and Health at Work* (pp.19-23). Nottingham, UK; I-WHO Publications.

Arthur, A. (2005). When stress is mental illness: a study of anxiety and depression in employees who use occupational stress counselling schemes, *Stress and Health*, 21, 273-280.

Arthur, A. (2006). Occupational health psychology in practice: The organisation, its employees and their mental health, in S. McIntyre & J. Houdmont (Eds.), *Occupational Health Psychology: European Perspectives on Research, Education and Practice (Vol. 1)*, Maia, Portugal: ISMAI Publications.

ASB Law and Human Resources (2005). *Stress at Work Survey*, Author, Retrieved, 14 April, 2006, from, <http://www.asb-law.com/asb/news/viewrelease.asp?newsid=82>.

Association of British Insurers (2004). *Costs and Benefits of Returning to Work and Vocational Rehabilitation in the UK*, Reading: Greenstreet Bergman.

Association of British Insurers (2005). *Memorandum submitted by the Association of British Insurers after the publication of the Welfare Reform Green Paper*, London: Association of British Insurers.

Bakker, A., Demerouti, E., Taris, T., & Schreurs, P. (2003). A multigroup analysis of the job demands-resources model in four home care organizations, *International Journal of Stress Management*, 10, 16-38.

Ballard, J. (2007). EAPs lose their appeal, *Occupational Health at Work*, 3, 20-22.

Barling, J. & Griffiths, A. (2003). A history of occupational health psychology, in J.C. Quick & L. Tetrick (Eds.), *Handbook of Occupational Health Psychology*, (pp. 19-33), Washington: American Psychological Association.

Barrett, B. (1995). Occupational stress, rescue workers and English law, *Work and Stress*, 9, 394-404.

Barrett, B. (1998). When should there be liability for negligently causing psychiatric illness? *Work and Stress*, 12, 101-111.

Barrett, B. (2004). Employers' liability for stress at the workplace: neither tort nor breach of contract? *Industrial Law Journal*, 33, 343-349.

Barsky, A., Thoresen, C., Warren, C. & Kaplan, S. (2004). Modeling negative affectivity and job stress: a contingency-based approach, *Journal of Organizational Behavior*, 25, 915-936.

Barton, A. & Lazarsfeld, P. (1969). Some functions of qualitative analysis. in, G. Macall & J. Simmons (Eds.), *Issues in Participant Observation*, Reading: Addison-Wesley.

Beehr, T., Glaser, K., Canali, K., & Wallwey, D. (2001). Back to basics: Re-examination of demand-control theory of occupational stress, *Work and Stress*, 15, 115-130.

Belkic, K., Landsbergis, P., Schnall, P. & Baker, D. (2004). Is job strain a major source of cardiovascular disease risk? *Scandinavian Journal of Work, Environment and Health*, 30, 85-128.

Bell, J. (2005). *Doing Your Research Project*, Milton Keynes: Open University Press.

Bennett, N., Dodd, T., Flatley, J., Freeth, S. & Bolling, K. (1993). *Health Survey for England 1993*. London: HMSO.

Bevan, S., Passmore, E. & Mahdon, M. (2007). *Fit For Work? Musculoskeletal Disorders and Labour Market Participation*, London: The Work Foundation.

Bicknell, M. & Liefoghe, A. (2006). The art of stress, *Journal of Occupational and Organizational Psychology*, 79, 377-394.

Black, C. (2008). *Working for a Healthier Tomorrow: Dame Carol Black's Review of the Health of Britain's Working Age Population*, London: The Stationery Office.

Blanchard, E., Hickling, E., Malta, L., Jaccard, J., Devineni, T., Veazey, C. & Gavloski, T. (2003). Prediction of response to psychological treatment among motor vehicle accident survivors with PTSD, *Behavior Therapy*, 34, 351— 363.

Blanchard, E., Jones-Alexander, J., Buckley, T. & Forneris, C. (1996). Psychometric properties of the PTSD Checklist (PCL), *Behaviour Research and Therapy*, 34, 669— 673.

Bond, F. (2004). Getting the balance right: The need for a comprehensive approach to occupational health, *Work and Stress*, 18, 146-148.

Bond, F., Flaxman, P. & Loivette, S. (2006). *A Business Case for the Management Standards for Stress*, Sudbury: HSE Books.

Bosma, H., Peter, R. Siegrist, J. & Marmot, M. (1998). Two alternative job stress models and the risk of coronary heart disease, *American Journal of Public Health*, 88, 68-74.

Bowling, A. (2002). *Research Methods in Health* (2nd Ed.), Buckingham: Open University Press.

Bradley, G. (2007). Job tenure as a moderator of stressor-strain relations: A comparison of experienced and new-start teachers, *Work and Stress*, 21, 48-64.

Bradshaw, L., Barber, C., Davies, J., Curran, A. & Fishwick, D. (2007). Work-related asthma symptoms and attitudes to the workplace, *Occupational Medicine*, 57, 30-35.

Brief, A., Burke, M., George, J., Robinson, B. & Webster, J. (1988). Should negative affectivity remain an unmeasured variable in the study of job stress, *Journal of Applied Psychology*, 73, 193-198.

Briner, R. & Reynolds, S. (1999). The costs, benefits and limitations of organisational level stress interventions, *Journal of Organizational Behavior*, 20, 647-664.

Brodie, D. (2004). Health and safety, trust and confidence and Barber v Somerset County Council: Some further questions, *Industrial Law Journal*, 33, 261-266.

Bryson, N. (2003). *Trade Union Trends Annual Survey (03/02) on Union Legal Services for Injury Victims*, Trades Union Congress, Retrieved, 16 April, 2003, from www.tuc.org.uk

Buchan, A. (2001). Stress cases: Foreseeability and breach, *Journal of Personal Injury Law*, 1, 5-25.

Buchan, A. (2002). *Stress Cases: What can be Learned?* Retrieved, 4 November, 2002, from, www.cloisters.com

Buchan, A. (2004a). *Workplace stress – new House of Lords ruling*, Retrieved, 1 February, 2005, from, www.lawtel.co.uk

Buchan, A. (2004b). Managing stress, *Solicitors Journal*, 148, 526-527.

Buchan, A. (2006). *Stress at Work: Is Hatton v Sutherland Still Good Law?* Retrieved, 30 June, 2006, from, <http://www.industriallawsociety.org.uk/papers/Buchan.htm#top>

Buchan, A. (2007). Stress at work – law and practice since Hatton v Sutherland, *Journal of Personal Injury Law*, 01/07, 49-69.

Burke, M., Brief, A. & George, J. (1993). The role of negative affectivity in understanding relations between self-reports of stressors and strains: a comment on the applied psychology literature, *Journal of Applied Psychology*, 78, 402-412.

Burns, R. (2000). *Introduction to Research Methods*. London: Sage Publications Inc.

Calnan, M., Wadsworth, E., May, M., Smith, A. & Wainright, D. (2004), Job strain, effort-reward imbalance, and stress at work: competing or complimentary models? *Scandinavian Journal of Public Health*, 32, 84-93.

Carlier, I. & Gersons, B. (1995). Partial Posttraumatic Stress Disorder (PTSD): The issue of psychological scars and the occurrence of PTSD symptoms, *Journal of Nervous Mental Disorders*, 183, 107-109.

Carlton, O. (2007). Station assistance, *Safety and Health Practitioner*, August.

Carroll, M. (1996). *Workplace Counselling*, London: Sage.

Cassell, C., Bishop, V., Symon, G., Johnson, P. & Buehring, A. (2006). *Enhancing the quality of qualitative research in the work psychology field*, Paper presented at the British Psychological Society Division of Occupational Psychology Annual Conference, January.

Cassell, C., Buehring, A., Symon, G., Johnson, P. & Bishop, V. (2005). *Qualitative Management Research: A Thematic Analysis of Interviews with Stakeholders in the Field*, Economic and Social Research Council.

Chartered Institute of Personnel and Development (2006). *Absence Management: Annual Survey Report 2006*, London: Chartered Institute of Personnel and Development.

Chartered Institute of Personnel and Development (2007). *New Directions in Managing Employee Absence*, London: Chartered Institute of Personnel and Development.

Chen, P. & Spector, P. (1991). Negative affectivity as the underlying cause of correlations between stressors and strains, *Journal of Applied Psychology*, 76, 398-407.

Clark, L. & Watson, D. (1991). General affective dispositions in physical and psychological health, in C.R. Snyder & D.R. Forsyth (Eds.) *Handbook of Social and Clinical Psychology*, New York, NY: Pergamon Press.

Clarke, S. (2004). *Development of an Indicator Tool to Support the Stress Management Standards*, MSc Statistics Dissertation, Sheffield Hallam University.

Clays, E., De Bacquer, D., Leynen, F., Kornitzer, M., Kittel, F. & De Backer, G. (2007). Job stress and depression symptoms in middle-aged workers: prospective results from the Belstress study, *Scandinavian Journal of Work, Environment and Health*, 33, 252-259.

Confederation of British Industry (1999). *CBI Response to Health and Safety Commission Discussion Document 'Managing Stress at Work'*, London: Confederation of British Industry.

Cook, T. & Campbell, D. (1979). *Quasi-Experimentation: Design and Analysis for Field Settings*, Boston: Houghton Mifflin.

Cooksley, N. (2005). Case Comment, *Journal of Personal Injury Law*, 2, 54-58.

Cooper, C., Dewe, P. & O'Driscoll, M. (2001). *Organisational Stress: A Review and Critique of Theory, Research and Applications*, London: Sage.

Cooper, C. (2000). Introduction: A discussion about the role of negative affectivity in job stress research, *Journal of Organizational Behavior*, 21, 77.

Cooper C., Sloan, S. & Williams, S. (1988). *Perceived Stress at Work Indicator*, Windsor: NFER-Nelson Publishing Company Ltd.

Cousins, R., Mackay, C., Clarke, S., Kelly, C., Kelly, P. & McCaig, R. (2004). 'Management Standards' and work-related stress in the UK: Practical development, *Work and Stress*, 18, 113-136.

Cox, T. (1978). *Stress*, London: Macmillan.

Cox, T. (1993). *Stress Research and Stress Management: Putting Theory to Work*, Sudbury: HSE Books.

Cox, T., Baldursson, E. & Rial-Gonzalez, E. (2000). Occupational health psychology, *Work and Stress*, 14, 101-104.

Cox, T. & Ferguson, E. (1994). Measurement of the subjective work environment, *Work and Stress*, 8, 98-109.

Cox, T. & Griffiths, A. (1995). The nature and measurement of work stress: Theory and practice, in J.R. Wilson & E.N. Corlett (Eds.), *Evaluation of Human Work: A Practical Ergonomics Methodology*, London: Taylor and Francis.

Cox, T., Griffiths, A., Barlow, C., Randall, R., Thomson, L. & Rial González, E. (2000). *Organisational Interventions for Work Stress*, Sudbury: HSE Books.

Cox, T., Griffiths, A. & Houdmont, J. (2006). *Defining a Case of Work-Related Stress*, Sudbury: HSE Books.

Cox, T., Griffiths, A. & Rial González, E. (2000). *Research on Work-Related Stress*, Luxembourg: Office for Official Publications of the European Communities.

Cox, T., Karanika, M., Mellor, N., Lomas, L., Houdmont, J. & Griffiths, A. (2007). *Implementation of the Management Standards for Work-Related Stress: Process Evaluation – Phase 1*. Report for the British Health and Safety Executive, Institute of Work, Health and Organisations: University of Nottingham.

Cox, T. & Mackay, C. (1979). Occupational stress and the quality of working life, in C. Mackay & T. Cox (Eds.), *Response to Stress*, Guildford: IPC.

Cox, T. & Mackay, C. (1981). A transactional approach to occupational stress, in E.N. Corlett & J. Richardson (Eds.), *Stress, Work Design and Productivity*, Chichester: Wiley and Sons.

Cox, T., Randall, R. & Griffiths, A. (2002). *Interventions to control stress at work in hospital staff*, Sudbury: HSE Books.

Cox, T. & Tisserand, M. (2006). Work and Stress comes of age: Twenty years of occupational health psychology, *Work and Stress*, 20, 1-5.

Crabtree, B. & Miller, W. (1999). Using codes and code manuals: a template organizing style of interpretation, in B. Crabtree & W. Miller (Eds.), *Doing Qualitative Research*, second edition, Newbury Park, CA: Sage.

Cranwell-Ward, J. & Abbey, A. (2005). *Organizational Stress*, Basingstoke: Palgrave MacMillan.

Crawford, J. & Laiou, E. (2007). Conservative treatment of work-related upper limb disorders-a review, *Occupational Medicine*, 57, 4-17.

Cunningham, J., Lischeron, J., Koh, H., & Farrier, M. (2004). A cybernetic framework linking personality and other variables in understanding general health, *Personnel Review*, 33, 55-80.

Daily Express (1999). *The £67,000 award that sends shivers down every boss's spine*, 6 July.

Daily Mail (1999). *Race to cash in on the stress bonanza*, 6 July.

Daily Mail (2000). L. Morris. *Home stress of pay-out teacher*, 6 December.

Daily Mail (2000). L. Clark. *Teacher wins £250,000 over stress*. 5 December.

Daily Mail (2001). *Police officer drops compensation case*. 22 March.

Daily Mail (2004). *Damages for overworked lecturer*, 8 February.

Daily Mail (2001). P. Markham. *Child abuse officer forced out by stress awarded £135,000*. 27 October.

Daily Telegraph (1996). C. Hall. *Social worker wins £175,000 over job stress*. 29 April.

Daily Telegraph (1998). N. Bunyan. *Ex Detective wins claim for 'years of stress'*. 9 May.

Daily Telegraph (1999). S. Laville. *Work stress ruined my life, says mother*. 26 June.

Daily Telegraph (1999). M. Weaver. *Woman awarded £67,000 for work-related stress*. 6 July.

Daily Telegraph (1999). S. Pook. *Teacher is awarded £47,000 for school stress*. 1 October.

Daily Telegraph (2000). M. Weaver. *Gypsy site warden gets £203,432 for stress*. 11 January.

Daily Telegraph (2000). M. Becket. *Claims for stress start to get on top of firms*. 31 January.

Daily Telegraph (2000). P. Foster. *Bank worker gets £100,000 stress payout*. 10 August.

Daily Telegraph (2000). L. Lightfoot. *Teacher receives record £254,000 payout for stress*. 5 December.

Daily Telegraph (2001). J. Steele. *Former Pc drops £400,000 stress claim against Met*. 23 March.

Daily Telegraph (2001). *£140,000 payout for woman made sick with stress*, 5 September.

Daily Telegraph (2001). N. Britten. *£140,000 payout for woman made sick with stress*. 4 May.

Daily Telegraph (2002) J. Rozenberg. *Judges tighten rules on stress payouts*. 6 February.

Daily Telegraph (2002). *Four cases at centre of ruling on stress*. 6 February.

Daily Telegraph (2004). C. Boffey. *Stressed trader lost bank £4m by going home early*. 27 April.

Daily Telegraph (2004). D. Millward. *Work stress ruined my marriage claims trader*. 28 April.

Daniels, K. (2006). Rethinking job characteristics in work stress research, *Human Relations*, 59, 267-290.

Daniels, K., Tregaskis, O. & Seaton, J. (2007). Job control and occupational health: The moderating role of national RandD activity, *Journal of Organizational Behaviour*, 28, 1-19.

Day, G. (2003). *Health and Rehabilitation at Work*, Institute of Directors, Retrieved 1 December, 2003, from www.iod.com

de Jonge, J., Bosma, H., Peter, R. & Siegrist, J. (2000). Job strain, effort-reward imbalance and employee well-being: a cross-sectional study, *Social Science and Medicine*, 50, 1317-1327.

de Jonge, J., & Dormann, C. (2003). The DISC model: Demand-Induced Strain Compensation mechanisms in job stress, in M.F. Dollard, A.H. Winefield & H.R. Winefield (Eds.), *Occupational stress in the service organizations* (pp. 75-102). London: Taylor and Francis.

de Jonge, J. & Schaufeli, W. (1998). Job characteristics and employee well-being: a test of Warr's Vitamin Model in health care workers using structural equation modeling, *Journal of Organizational Behavior*, 19, 387-407.

de Lange, A., Taris, T., Kompier, M., Houtman, I., & Bongers, P. (2003). The very best of the millennium: Longitudinal research on the job demands-control model, *Journal of Occupational Health Psychology*, 8, 282-305.

de Lange, A., Taris, T., Kompier, M., Houtman, I., & Bongers, P. (2004). The relationships between work characteristics and mental health: Examining normal, reversed and reciprocal relationships in a 4-wave study, *Work & Stress*, 18, 149-166.

De Raeve, L., Vasse, R., Jansen, N., van den Brandt, P. & Kant, I. (2007). *Mental Health Effects of Changes in Psychosocial Work Characteristics: a Prospective Cohort study*, Paper presented at the 13th European Congress of Work and Organisational Psychology, Stockholm, Sweden, May 9-12.

DeFrank, R.S. (1988). Psychometric measurement of occupational stress: Current concerns and future directions, In Hurrell, J., Murphy, L., Sauter, S. & Cooper, C. (Eds.), *Occupational Stress: Issues and Developments in Research*, London: Taylor and Francis.

Department for Work and Pensions (2003). Review of Employers' Liability Compulsory Insurance, Retrieved 3 September, 2007, from,

http://www.dwp.gov.uk/publications/dwp/2003/elci/dw2583_employers_review.pdf

Department for Work and Pensions (2007). *GPs reconsider advice given to patients on sick leave*, retrieved, 6 November, 2007, from, <http://www.dwp.gov.uk/mediacentre/pressreleases/2007/sep/emp034-050907.asp>

Department for Work & Pensions, Department of Health and Health & Safety Executive (2005). *Health, Work & Well-being: A Strategy for the Health and Well-being of Working Age People*, London: HMSO.

Department of Social Security Medical Group (1998). *Stress-related Illness – A Report for DSS Policy Group, Part I*. Retrieved, 1 July, 2004, from, <http://www.dwp.gov.uk/medical/sreport1.pdf>

Department of the Environment, Transport and the Regions (2000). *Revitalising Health and Safety Strategy Statement*, London: The Stationary Office.

Dowrick, C., Gask, L., Perry, R., Dixon, C. & Usherwood, T. (2000). Do general practitioners' attitudes towards depression predict their clinical behaviour? *Psychological Medicine*, 30, 413-419.

Eakin, J., MacEachen, E. & Clarke, J. (2003). 'Playing it smart' with return to work: Small workplace experience under Ontario's policy of self-reliance and early return, *Policy and Practice in Health and Safety*, 1, 19–42.

Earnshaw, J. & Cooper, C. (1994). Employee stress litigation: The UK experience, *Work and Stress*, 8, 287-295.

Earnshaw, J. & Cooper, C.L. (2001). *Stress and Employer Liability* (2nd ed.), London: Chartered Institute of Personnel and Development.

Earnshaw, J. & Morrison, L. (2001). Should employers worry? Workplace stress claims following the John Walker decision, *Personnel Review*, 30, 468-487.

Edwards, J., Webster, S., Van Laar, D. & Easton, S. (2008). Psychometric analysis of the UK Health and Safety Executive's Management Standards work-related stress Indicator Tool, *Work & Stress*, 22, 96-107.

Elangovan, A. & Xie, J. (1999). Effects of perceived power of supervisor on subordinate stress and motivation: The moderating role of subordinate characteristics, *Journal of Organizational Behavior*, 20, 359-373.

Elliot, R., Fischer, C. & Rennie, D. (1999). Evolving guidelines for publication of qualitative research studies in psychology and related fields, *Journal of Clinical Psychology*, 38, 215-229.

Elo, A-L., Leppänen, A. & Jahkola, A. (2003). Validity of a single item measure of stress symptoms, *Scandinavian Journal of Work, Environment and Health*, 29, 444-451.

Engineering Employers' Federation (2007). *Sickness Absence and Rehabilitation Survey 2007*, London: Engineering Employers' Federation.

Erjavec, K. (2004). Beyond advertising and journalism: Hybrid promotional news discourse, *Discourse and Society*, 15, 553-578.

European Commission (1989). *Council Directive 89/391/EEC. On the Introduction of Measures to Encourage Improvements in the Safety of Health of Workers at Work*, Brussels: European Commission.

European Commission (1997). *Report on Work-Related Stress*, The Advisory Committee for Safety, Hygiene and Health Protection at Work, Brussels: European Commission.

European Commission (2002). *Guidance on Work-Related Stress: Spice of Life or Kiss of Death?*, Luxembourg: Office for Official Publications of the European Communities.

European Commission (2004). *Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of Regions on the practical implementation of the provisions of the Health and Safety at Work Directives 89/391 (Framework), 89/654 (Workplaces), 89/655 (Work Equipment), 89/656 (Personal Protective Equipment), 90/269 (Manual Handling of Loads) and 90/270 (Display Screen Equipment)*, Brussels: European Commission.

European Commission (2005). *Green Paper: Improving the Mental Health of the Population: Towards a Strategy on Mental Health for the European Union*, European Commission.

European Commission (2007). *Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: Improving Quality and Productivity at Work: Community Strategy 2007-2012 on Health and Safety at Work*, Brussels: European Commission.

European Foundation for the Improvement of Living and Working Conditions (2001). *Work-related stress and industrial relations*. Dublin, Ireland: Author. Retrieved 25th March, 2003, from, www.eiro.eurofound.ie/2001/11/study/TN0111109S.html

European Parliament (2006). *European Parliament Resolution on Improving the Mental Health of the Population: Towards a Strategy on Mental Health for the European Union (2006/2058/(INI))*.

European Trades Union Confederation (2004). *Framework Agreement on Work-related Stress*, Retrieved, 14 May, 2007, from, <http://www.etuc.org/a/529>

European Trades Union Confederation (2006). *Implementation of the Framework Agreement on Work-related Stress*, Retrieved, 14 May, 2007, from, http://www.etuc.org/IMG/pdf/Joint_Table_Implementation_Stress_final3.pdf

Evans, C., Mellor-Clark, J., Margison, F., Barkham, M., Audin, K., Connell, J., & McGrath, G. (2000). Clinical outcomes in routine evaluation: The CORE outcome measure, *Journal of Mental Health*, 9, 247-255.

Eves, B. (1998). Don't panic, *Health Insurance*, Retrieved, 23 April, 2007, from, <http://www.hi-mag.com/healthinsurance/article.jsp?articleid=20000080202>

Faculty of Occupational Medicine (2005). *The Health and Work Handbook*. Faculty of Occupational Medicine, Royal College of General Practitioners, Society of Occupational Medicine: London. Retrieved, 14 December 2006, from, www.facocmed.ac.uk/library/docs/handw.pdf

Fairclough, N. (1989). *Language and Power*. London: Longman.

Fairclough, N. (1992). *Discourse and Social Change*. London: Polity Press.

Fairclough, N. (1993). Critical discourse analysis and the marketisation of public discourse: The universities, *Discourse and Society*, 4, 133-168.

Fairclough, N. (1995). *Media Discourse*. London: Edward Arnold.

Fairclough, N. (2005). Peripheral vision: Discourse analysis in organisation studies: The case for critical realism, *Organization Studies*, 26, 915-939.

Ferrie, J. (2004). *Work, Stress and Health: The Whitehall II Study*, London: Public and Commercial Services Union.

Ferrie, J., Kivimaki, M., Head, J., Shipley, M., Vahtera, J. & Marmot, M. (2005). A comparison of self-reported sickness absence with absences recorded in employers' registers: evidence from the Whitehall II study, *Occupational and Environmental Medicine*, 62, 74-79.

Ferris, G., Bowen, M., Treadway, D., Hochwarter, W., Hall, A. & Perrewe, P. (2006). The assumed linearity of organizational phenomena: Implications for

occupational stress and well-being, in P. Perrewe & D. Ganster (Eds.), *Employee Health, Coping and Methodologies*, Oxford: Elsevier.

Fielding, J. (1993). Coding and managing data, in N. Gilbert (Ed.), *Researching Social Life*, London: Sage Publications.

Financial Times (2002). N. Tait, *Appeal court overturns stress-at-work payouts: Employee awards reversed on grounds that harm must be 'reasonably foreseeable'*, 6 February.

Financial Times (2002). N. Tait, *Companies and staff gain from a ruling that offers a checklist on liability*, 11 February.

Financial Times (2004). N. Tait, *Stress-case City trader agrees settlement with Commerzbank*, 29 April.

Financial Times (2004). N. Tait, *Stress case appeal overturned by Lords*, 2 April.

Financial Times (2007). N. Tait, *Analyst's payout for stress at work upheld by Court of Appeal*, 8 February.

Fowler, R. (1991). *Language in the news: Discourse and ideology in the press*, London: Routledge.

Frost, K., Frank, E. & Maibach, E. (1997). Relative risk in the news media: A quantification of misrepresentation, *American Journal of Public Health*, 87, 842-845.

Furnham, A. (1997). Lay theories of work stress. *Work and Stress*, 11, 68-78.

Gask, L., Dixon, C., May, C. & Dowrick, C. (2005). Qualitative study of an educational intervention for GPs in the assessment and management of depression, *British Journal of General Practice*, 55, 854-859.

- Gelder, M., Gath, D., Mayou, R. & Cowen, P. (1996). *Oxford Textbook of Psychiatry* (3rd ed.), Oxford University Press.
- Glaser, B.G. & Strauss, A.L. (1967). *The Discovery of Grounded Theory: Strategies for Qualitative Research*, New York, NY: Aldine Publishing Company.
- Glozier, N. (2002). Mental ill health and fitness for work, *Occupational and Environmental Medicine*, 59, 714-720.
- Goddard, S. (1999). Worry over stress claims growing: Survey, *Business Insurance*, 33, 113.
- Goldberg, D. (1978). *Manual of the General Health Questionnaire*, Windsor, England: NFER Publishing.
- Goldman, L. and Lewis, J. (2003). Stressful crimes, *Occupational Health*, 55, 10.
- Griffiths, A. and Cox, T. (1998). *Work Stress: Advice on its Prevention and Management*, Borehamwood: The Loss Prevention Council.
- Griffiths, A., Cox, T., Karanika, K., Khan, S. & Tomas, J. (2006). Work design and management in the manufacturing sector: Development and Validation of the Work, Organisation Assessment Questionnaire, *Occupational and Environmental Medicine*, 63, 669-675.
- Guest, G. & Drummond, P. (1992). Effect of compensation on emotional state, and disability in chronic back pain, *Pain*, 48, 125-130.
- Hamilton, J. (2008). Work-related stress: Reforming the law and employer behaviour, 8th *European Academy of Occupational Health Psychology Conference*, 12-14 November, Valencia, Spain.
- Harding, R. (2006). Historical representations of aboriginal people in the Canadian news media, *Discourse and Society*, 17, 205-235.

Hazards Magazine (1994/5). Worked to death, *Hazards Magazine*, 49, Retrieved, 31 May, 2007, from, <http://www.hazards.org/workedtodeath/overwork.htm>

Head, J., Kivimaki, M., Martikainen, V., Vahtera, J., Ferrie, J. & Marmot, M. (2006). Influence of change in psychosocial work characteristics on sickness absence: The Whitehall II study, *Journal of Epidemiology and Community Health*, 60, 55-61.

Health and Safety Commission (2000). *Securing Health Together: A long-term occupational health strategy for England, Scotland and Wales*. Sudbury: HSE Books.

Health and Safety Commission (2002). *Health and Safety Targets: How are we doing?* Sudbury: HSE Books.

Health and Safety Executive (1999). *Managing Stress at Work*. Sudbury: HSE Books.

Health and Safety Executive (2001a). *Work-Related Stress: A Short Guide*, Sudbury: HSE Books.

Health and Safety Executive (2001b). *Achieving the Revitalising Health and Safety Targets: Statistical Note on Progress Measurement*, Retrieved, 25 March, 2008, from, <http://www.hse.gov.uk/statistics/statnote.pdf>

Health and Safety Executive (2001c). *Achieving the Revitalising Health and Safety Targets Statistical Note on Progress Measurement: Update based on data published in Health and Safety Statistics 2000/01*, Retrieved, 31 January, 2006, from, <http://www.hse.gov.uk/statistics/pdf/snoct01.pdf>

Health and Safety Executive (2001d). *Tackling work-related stress – a manager's guide to improving and maintaining employee health and well-being*, Sudbury: HSE Books.

Health and Safety Executive (2002). *Occupational Stress Statistics Information Sheet 1/02/EMSU*, Retrieved April 7, 2003, from www.hse.gov.uk/statistics/2002/stress.pdf

Health and Safety Executive (2003a). *Health and Safety Targets: How are we Doing? 2002/3*, Sudbury: HSE Books.

Health and Safety Executive (2003b). *Improvement Notice Number 006638 (West Dorset General Hospitals NHS Trust)*.

Health and Safety Executive (2003c). *Real Solutions, Real People: A Managers' Guide to Tackling Work-Related Stress*, Sudbury: HSE Books.

Health and Safety Executive (2004a). *Health and Safety Statistics Highlights 03/04*, Sudbury: HSE Books.

Health and Safety Executive (2004b). *Psychosocial working conditions in Great Britain 2004*, Sudbury: HSE Books.

Health and Safety Executive (2005a). *Achieving the Revitalising Health and Safety Targets Statistical Progress Report, November 2005*, retrieved, 25 March, 2008, from, <http://www.hse.gov.uk/statistics/pdf/prog2005.pdf>

Health and Safety Executive (2005b). *Psychosocial working conditions in Great Britain 2005*, Sudbury: HSE Books.

Health and Safety Executive (2006). *Psychosocial Working Conditions in Great Britain in 2005*, Sudbury: HSE Books.

Health and Safety Executive (2007). *Self-Reported Work-Related Illness and Workplace Injuries in 2005/06: Results from the Labour Force Survey*, Sudbury: HSE Books.

Health & Safety Executive (2008). Topic Information Pack: Work-Related Stress, retrieved, 1 August 2008, from, <http://www.hse.gov.uk/foi/internalops/fod/inspect/stress.pdf>

Henderson, M. (2007). *Transformation of the Personal Capability Assessment: Technical Working Group's Phase 2 Evaluation Report*, Department for Work and Pensions.

Herzog, T. (1996). *Research Methods in the Social Sciences*, New Jersey: Prentice-Hall, Inc.

Hodgson, J., Jones, J., Clarke, S., Blackburn, A., Webster, S., Huxtable, C. & Wilkinson, S. (2006). *Workplace Health and Safety Survey Programme: 2005 Worker Survey First Findings Report*, Sudbury: HSE Books.

Hodgson, J.T., Jones, J.R., Elliot, R.C. & Osman, J. (1993). *Self-Reported Work-Related Illness: Results from a Trailer Questionnaire on the 1990 Labour Force Survey in England and Wales*, Sudbury: HSE Books.

Holt, R. (1993). Occupational stress, in L. Goldberger & S. Breznitz (Eds.), *Handbook of Stress: Theoretical and Clinical Aspects* (2nd ed.), New York: The Free Press.

Houdmont, J., Cox, T. & Griffiths, A. (2006). Development of an occupational health case definition for work-related by expert consensus, 7th *European Academy of Occupational Health Psychology Conference*, 8-10 November, Dublin, Ireland.

Houdmont, J., Cox, T. & Griffiths, A. (2008a). The design of case definitions for work-related stress in large-scale workforce surveys in Britain: Implications for policy and practice, 8th *European Academy of Occupational Health Psychology Conference*, 12-14 November, Valencia, Spain.

Houdmont, J., Cox, T. & Griffiths, A. (2008b). The personal injury case definition as it applies to work-related stress: Challenges of structure and application, 8th

European Academy of Occupational Health Psychology Conference, 12-14 November, Valencia, Spain.

Houdmont, J., Cox, T. & Griffiths, A. (2008c). Media representations and the social construction of work-related stress, *APA/NIOSH/SOHP, Work, Stress and Health Conference*, 6-8 March, Washington, DC: USA.

Houdmont, J., Leka, S. & Bulger, C. (2008). The definition of curriculum areas in occupational health psychology, in J. Houdmont & S. Leka (Eds), *Occupational Health Psychology: European Perspectives on Research, Education and Practice (Vol. 3)*, Nottingham, UK: European Academy of Occupational Health Psychology and Nottingham University Press.

Howard, G. (1995). Occupational stress and the law: Some current issues for employers, *Journal of Psychosomatic Research*, 39, 707-719.

HSA (2007). *HSA Annual Market Survey 2007*, retrieved, 10 September 2007, from, <http://www.hsa.co.uk/NR/rdonlyres/F2A307A2-ECAC-40F1-B2F5-C3E64DB1F29E/0/AnnualMarketSurveySINGLES.pdf>

Huang, G., Feuerstein, M. & Sauter, S. (2002). Occupational stress and work-related upper extremity disorders: concepts and models, *American Journal of Industrial Medicine*, 41, 298-314.

Industrial Injuries Advisory Council (2004). *Stress as a Prescribed Disease and Post Traumatic Stress Disorder*. Author. Retrieved 8 April 2004, from, www.iiac.org.uk

Iverson, G. & Lange, R. (2006). Detecting exaggeration and malingering in psychological injury claims, in W.J. Koch (Ed.), *Psychological Injuries: Forensic Assessment, Treatment, and Law*, Cary, NC, USA: Oxford University Press.

Jamdar, S. & Byford, J. (2003). *Workplace Stress: Law and Practice*, London: The Law Society.

Jex, S., Beehr, T. & Roberts, C. (1992). The meaning of occupational stress items to survey respondents, *Journal of Applied Psychology*, 77, 623-628.

Jex, S. & Spector, P. (1996). The impact of negative affectivity on stressor-strain relations: a replication and extension, *Work and Stress*, 10, 36-45.

Johnson, J. & Hall, E. (1988). Job strain, workplace social support and cardiovascular disease: A cross sectional study of a random sample of the Swedish working population, *American Journal of Public Health*, 78, 1336-1342.

Joner, A. & Riekeles, S. (2007). *Extending the individual placement and support model in the vocational rehabilitation of people suffering from mood and anxiety disorders*, Paper presented at the 13th European Congress of Work and Organisational Psychology, Stockholm, Sweden, May 9-12.

Jones, R., Hodgson, J., Clegg, T. & Elliott, R. (1998). *Self-Reported Work-Related Illness in 1995: Results from a Household Survey*, Sudbury: HSE Books.

Jones, R., Huxtable, C. & Hodgson, J. (2001). *Self-Reported Work-Related Illness in 1998/99 : Results from EUROSTAT Ill-Health Module in the 1999 Labour Force Survey Summer Quarter*, Sudbury : HSE Books.

Jones, R., Huxtable, C. & Hodgson, J. (2005). *Self-Reported Work-Related Illness in 2003/2004 : Results from the Labour Force Survey*, Sudbury: HSE Books.

Jones, R., Huxtable, C. & Hodgson, J. (2006). *Self-Reported Work-Related Illness in 2004/2005 : Results from the Labour Force Survey*, National Statistics.

Jones, R., Huxtable, C., Hodgson, J. & Price, M. (2003). *Self-Reported Work-Related Illness in 2001/2002: Results from a Household Survey*, Sudbury: HSE Books.

Kabanoff, B. (1997). Computers can read as well as count: Computer-aided text analysis in organizational research, *Journal of Organizational Behavior*, 18, 507–11.

Karasek, R. (1979). Job demands, job decision latitude, and mental strain: implications for job redesign, *Administrative Science Quarterly*, 24, 285–308.

Karasek, R., Brisson, C., Kawakami, N., Houtman, I., Bongers, P. & Amick, B. (1998). The job content questionnaire (JCQ): an instrument for internationally comparative assessments of psychological job characteristics, *Journal of Occupational Health Psychology*, 3, 322–355.

Karasek, R. & Theorell, T. (1990). *Healthy work: Stress, productivity and the reconstruction of working life*, New York: Basic Books.

Kasl, S. (1978). Epidemiological contributions to the study of work stress, in C. Cooper & R. Payne (Eds.), *Stress at Work*, New York: John Wiley.

Kasperson, J., Kasperson, R., Perkins, B., Renn, O. & White, A. (2005). Media risk signals and the proposed Yucca Mountain nuclear waste repository, 1985–1989, in J. Kasperson & R. Kasperson (Eds.), *The Social Contours of Risk, Vol. 1: Publics, Risk Communication and the Social Amplification of Risk*, London: Earthscan.

Kawamaki, N., Haratini, T. & Araki, S., (1992). Effects of perceived job stress on depressive symptoms in blue collar workers of an electrical factory in Japan, *Scandinavian Journal of Work, Environment and Health*, 18, 195–200.

Kendall, E., Murphy, P., O'Neill, V. & Bursnall, S. (2000). *Occupational Stress: Factors that Contribute to its Occurrence and Effective Management*, WorkCover: Western Australia.

Kendall, E., Meunchberger, H. & O'Neill, V. (2003). *Measurement of Occupational Stress Among Australian Workers: Perceived Stressors and Supports*, WorkCover: Western Australia.

King, N. (1994). The qualitative research interview. in C. Cassell & G. Symon (Eds.), *Qualitative Methods in Organizational Research: A Practical Guide* (pp.14-36). London: Sage.

King, N. (1999). Template analysis, In G. Symon & C. Cassell (Eds.), *Qualitative Methods and Analysis in Organisational Research*, (pp. 118–134). London: Sage.

King, N. (2004). Using templates in the thematic analysis of text. in C. Cassell & G. Symon (Eds.), *Essential Guide to Qualitative Methods in Organisational Research* (p. 258), London: Sage Publications.

King, N., Carroll, C., Newton, P. & Dornan, T. (2002). "You can't cure it so you have to endure it": The experience of adaptation to diabetic renal disease, *Qualitative Health Research*, 12, 329-346.

Kinman, G. & Jones, F. (2005). Lay representations of workplace stress: What do people really mean when they say they are stressed? *Work and Stress*, 19, 101-120.

Kinman, G. & Jones, F. (2008a). Effort-reward imbalance and overcommitment: Predicting strain in academic employees in the United Kingdom, *International Journal of Stress Management*, 15, 381-395.

Kinman, G. & Jones, F. (2008b). Effort-reward imbalance, over-commitment and work-life conflict: Testing an expanded model, *Journal of Managerial Psychology*, 23, 236-251.

Kivimaki, M., Vahtera, J., Elovainio, M., Virtanen, M. & Siegrist, J. (2007). Effort-reward imbalance, procedural injustice and relational injustice as psychosocial predictors of health: complimentary or redundant models? *Occupational and Environmental Medicine*, 64, 659-665.

Kivimaki, M., Virtanen, M., Elovainio, M., Kouvonen, A., Vaananen, A. & Vahtera, J. (2006). Work stress in the etiology of coronary heart disease: A meta analysis, *Scandinavian Journal of Work, Environment and Health*, 32, 431-442.

Kjaerheim, K., Haldorsen, T. & Andersen, A. (1997). Work-related stress, coping resources, and heavy drinking in the restaurant business, *Work and Stress*, 11, 6-16.

Koch, W.J., Douglas, K., Nichols, T. & O'Neill, M. (2006). *Psychological Injuries: Forensic Assessment, Treatment, And Law*, Cary, NC, USA: Oxford University Press.

Koch, W.J., Shercliffe, R., Fedoroff, I., Iverson, G.L., and Taylor, S. (1999). Malingering and litigation stress in motor vehicle accident victims. In E.J. Hickling and E.B. Blanchard (Eds.), *International handbook of road traffic accidents and psychological trauma: Current understanding, treatment, and law*. New York: Pergamon Press.

Kompier, M. (2006). New systems of work and workers' health, *Scandinavian Journal of Work, Environment and Health*, 32, 421-430.

Kompier, M., De Gier, E., Smulders, P. & Draaisma, D. (1994). Regulations, policies and practices concerning work stress in five European countries, *Work & Stress*, 8, 296-318.

Kompier, M., & Taris, T. (2004). Assessing methodological quality and biological plausibility in occupational health psychology, *Scandinavian Journal of Work, Environment and Health*, 30, 81-83.

Krippendorff, K. (2004). *Content analysis*, Thousand Oaks, CA: Sage.

Kujala, V., Tammelin, T., Remes, J., Vammavaara, E., Ek, E. & Laitinen, J. (2006). Work ability index of young employees and their sickness absence during the following year, *Scandinavian Journal of Work, Environment and Health*, 32, 75-84.

Kuper, H., Singh-Manoux, A., Siegrist J. & Marmot, M. (2002). When reciprocity fails: effort-reward imbalance in relation to coronary heart disease and health

functioning within the Whitehall II study, *Occupational and Environmental Medicine*, 59, 777-784.

Kvale, S. (1996). *Interviews*. Thousand Oaks: Sage.

Lamontagne, A., Keegel, T., Louie, A., Ostry, A. & Landsbergis, P. (2007). A systematic review of the job-stress intervention evaluation literature, 1990-2005, *International Journal of Occupational and Environmental Health*, 13, 268-280.

Larkin, P. (1997). Trade union perspective, in K. Addley (Ed.), *Occupational Stress: A Practical Approach*, Oxford: Butterworth Heinemann.

Last, J. (2001). *A Dictionary of Epidemiology* (4th Ed), New York; Oxford: Oxford University Press.

Law Commission (1995). *Liability for Psychiatric Illness: Consultation Paper No. 137*, London: The Stationery Office.

Law Commission (1998). *Liability for Psychiatric Illness*, No. 249, London: The Stationery Office.

Lazarus, R. (1990). Theory-based stress management, *Psychological Inquiry*, 1, 3-13.

Lazarus, R. (1991). Psychological stress in the workplace, in P. Perrewe (Ed.), *Handbook on Job Stress [Special Issue]*. *Journal of Social Behaviour and Personality*, 6, 1-13.

Le Fevre, M., Matheny, J. & Kolt, G. (2003). Eustress, distress and interpretation in occupational stress, *Journal of Managerial Psychology*, 18, 726-744.

Lea, R. (2003). *The Work Life Balance Revisited*, Institute of Directors, Retrieved 1 December, 2003, from, www.iod.com

Leighton, P. (1994). What has the law to do with stress prevention? *Work and Stress*, 8, 283-285.

Leka, S. (2003). *Occupational Health and Safety Practices in Small and Medium Sized Enterprises: A Comparative Study Between England and Greece*, Unpublished PhD Thesis, University of Nottingham, UK.

Leka, S. & Houdmont, J. (2004). Occupational health psychology: The UK situation and avenues for development, in J. Houdmont & S. McIntyre (Eds.), *Occupational Health Psychology: Key Papers of the European Academy of Occupational Health Psychology (Vol. 6)*, Maia, Portugal: ISMAI Publishers.

Leka, S., Khan, S. & Griffiths, A. (2007). *Exploring Training Needs for Health and Safety Practitioners*, Report for the Institution of Occupational Safety and Health.

Levi, L. (1998). Preface: stress in organizations – theoretical and empirical approaches, in Cooper, C. (Ed.), *Theories of Organizational Stress*, Oxford University Press, New York, NY.

Lewig, K. & Dollard, M. (2001). Social construction of Work-Related Stress: Australian newsprint media portrayal of stress at work, 1997-1998, *Work and Stress*, 15, 179-190.

Lindberg, P., Josephson, M., Alfredson, L. & Vingard, E. (2006). Promoting excellent work ability and preventing poor work ability: The same determinants? Results from the Swedish HAKUL study, *Occupational and Environmental Medicine*, 63, 113-120.

Lippel, K. (1999a). Therapeutic and anti-therapeutic consequences of workers' compensation, *International Journal of Law and Psychiatry*, 22, 521-546.

Lippel, K. (1999b). Workers' compensation and stress, *International Journal of Law and Psychiatry*, 22, 79--89.

Lippel, K. (2007). Workers describe the effect of the workers' compensation process on their health: A Quebec study, *International Journal of Law and Psychiatry*, 30, 427-443.

Lucas, H., Scammell, A. & Hagelskamp, C. (2005). How do GP registrars feel about dealing with mental health issues in the primary care setting? A qualitative investigation, *Primary Health Care Research and Development*, 6, 60-71.

Lyons, A. (2000). Examining media representations: Benefits for health psychology, *Journal of Health Psychology*, 5, 349-358.

MacEachen, E., Clarke, J., Franche, R-L. & Irvin, E. (2006). Systematic review of the qualitative literature on return to work after injury, *Scandinavian Journal of Work, Environment and Health*, 32, 257-269.

Macik-Frey, M., Quick, J. & Nelson, D. (2007). Advances in occupational health: From a stressful beginning to a positive future, *Journal of Management*, 33, 809-840.

Mackay, C., Cousins, R., Kelly, P., Lee, S. & McCaig, R. (2004). 'Management Standards' and work-related stress in the UK: Policy background and science, *Work and Stress*, 18, 91-112.

Mail on Sunday (2004). *Teachers in claims for £50m over stress*, 29 August.

Marmot, M., Bosma, H., Hemingway, H., Brunner, E. & Stansfeld, S. (1997). Contribution of job control and other risk factors to social variations in coronary heart disease, *Lancet*, 350, 235-40.

Matthews, R. & Barnes-Farrell, J. (2006). *Occupational health psychology: a critical review of methodologies*, Paper presented to the APA/NIOSH conference on Work, Stress and Health 2006: Making a Difference in the Workplace, 2-4 March 2006.

Maxwell, J. (1996). *Qualitative Research Design: An Interactive Approach*, London: Sage.

Mayou, R. (1995). Psychological, quality of life and legal consequences of road traffic accident injury, *Journal of Personal Injury Litigation*, Dec., 277-290.

Mayou, R. (1996). Accident Neurosis Revisited, *British Journal of Psychiatry*, 168, 399-403.

McElfatrick, S., Carson, J., Annet, J., Cooper, C., Holloway, F. & Kuipers, E. (2000). Assessing coping skills in mental health nurses: Is an occupation-specific measure better than a generic coping skills scale? *Personality and Individual Differences*, 28, 965-976.

McLeod, R. (2005). Don't bury head in the sand over stress, *Personnel Today*, 13 Dec.

Melchior, M., Niedhammer, I., Berkman, L. & Goldberg, M. (2003). Do psychosocial work factors and social relations exert independent effects on sickness absence? A six year prospective study of the GAZEL cohort, *Journal of Epidemiology and Community Health*, 57, 285-293.

Mendelson, G. (1995). Compensation neurosis revisited: Outcome studies of the effects of litigation, *Journal of Psychosomatic Research*, 39, 695-706.

Mendoza, M. (2005). Breaking Point, *Human Resources*, April, 24-26.

Mertens, D. (1998). *Research Methods in Education and Psychology: Integrating diversity with quantitative and qualitative approaches*. California: Sage Publications Inc.

Miles, M. & Huberman, M. (1994). *Qualitative Data Analysis: An Expanded sourcebook*, Thousand Oaks, CA: Sage.

Mino, Y., Shigemi, J., Tsuda, T., Yasuda, N. & Bebbington, P. (1999). Perceived job stress and mental health in precision machine workers of Japan: A 2 year cohort study, *Occupational and Environmental Medicine*, 56, 41-45.

Mohr, G. (2000). The changing significance of different stressors after the announcement of bankruptcy: A longitudinal investigation with special emphasis on job insecurity, *Journal of Organizational Behavior*, 21, 337-359.

Morita, N. & Wada, I. (2007). Job stress and mental health of child counselling office workers, *Journal of Occupational Health*, 49, 125-133.

Mowlam, A. & Lewis, J. (2005). *Exploring how General Practitioners work with patients on sick leave*, London: Her Majesty's Stationery Office.

Netterstrom, B., Conrad, N., Bech, P., Fink, P., Olsen, O., Rugulies, R. & Stansfeld, S. (2008). The relation between work-related psychosocial factors and the development of depression, *Epidemiologic Reviews*, mxn004v1.

Niedhammer, I., Bugel, I., Goldberg, M., Leclerc, A. & Gueguen, A. (1998). Psychosocial factors at work and sickness absence in the Gazel cohort: A prospective study, *Occupational and Environmental Medicine*, 55, 735-741.

Nielsen, M., Rugulies, R., Christensen, K., Smith-Hansen, L., Bjorner, J. & Kristensen, T. (2004). Impact of the psychosocial work environment on registered absence from work: A two-year longitudinal study using the IPAW cohort, *Work and Stress*, 18, 323-335.

Nieuwenhuijsen, K., Verbeek, J., de Boer, A., Blonk, R. & van Dijk, F. (2006). Predicting the duration of sickness absence for patients with common mental disorders in occupational health care, *Scandinavian Journal of Work, Environment and Health*, 32, 67-74.

Noblett, A., Rodwell, J. & McWilliams, J. (2006). Organisational change in the public sector: Augmenting the demand-control model to predict employee outcomes under New Public Management, *Work and Stress*, 20, 335-352.

Nolan, D. (2004). Psychiatric injury at the crossroads, *Journal of Personal Injury Law*, 1, 1-20.

Nomura, K., Nakao, N., Karita, K., Nishikitani, M. & Yano, E. (2005). Association between work-related psychological stress and arterial stiffness measured by brachial-ankle pulse-wave velocity in young Japanese males from an information services company, *Scandinavian Journal of Work, Environment and Health*, 31, 352-359.

North, F., Syme, S., Feeney, A., Shipley, M. & Marmot, M. (1996). Psychosocial work environment and sickness absence among British civil servants: The Whitehall II Study, *American Journal of Public Health*, 86, 332-40.

Norwich Union Healthcare (2005). *Mental disorders top Norwich Union Healthcare's IP Claims*, Retrieved, 21 December, 2005, from, <http://www.healthcarezone.co.uk/news-updates/market-news/2004-06.htm>

Oliver, R. (2002). *Trade Union Trends: Focus on Services for Injury Victims 2001*, London: Trades Union Congress.

Oswick, C., Keenoy, T. & Grant, D. (1997). Managerial Discourses: Words Speak Louder than Actions? *Journal of Applied Management Studies* 6, 5-12.

Paoli, P. (1992). *First European Survey on the Work Environment*, Dublin: European Foundation for the Improvement of Living and Working Conditions.

Paoli, P. (1997), *Second European Survey on Working Conditions*, Dublin: European Foundation for the Improvement of Living and Working Conditions.

Paoli, P. & Merllié, D. (2001). *Third European Survey on Working Conditions 2000*, Luxembourg: Office for Official Publications of the European Communities.

Parent-Thirion, A., Macías, E., Hurley, J. & Vermeulen, G. (2007). *Fourth European Working Conditions Survey*, Luxembourg: Office for Official Publications of the European Communities.

Parkes, K. (1990). Coping, negative affectivity, and the work environment: additive and interactive predictors of mental health, *Journal of Applied Psychology*, 75, 399-409.

Patten, K. (2004). Workplace stress and the proactive employer, *Web Journal of Current Legal Issues*, 3.

Patton, E. & Johns, G. (2007). Womens' absenteeism in the popular press: Evidence for a gender-specific absence culture, *Human Relations*, 60, 1579-1612.

Payne, R. (2000). Comment on 'Why negative affectivity should not be controlled in job stress research: Don't throw out the baby with the bathwater', *Journal of Organizational Behavior*, 21, 97-99.

Peart, G. (2003). Psychiatric injury claims, *Journal of Personal Injury Law*, Jan, 25-47.

Penney, L. & Spector, P. (2005). Job stress, incivility and counterproductive work behavior (CWB): The moderating role of negative affectivity. *Journal of Organizational Behavior*, 26, 777-796.

Perrewe, P. & Ganster, D. (Eds.) (2002). *Research in Occupational Stress and Well Being: Historical and Current Perspectives on Stress and Health*, Amsterdam: JAI.

Peter, R., Alfredson, L., Hammar, N. et al. (1998). High effort, low reward, and cardiovascular risk factors in employed Swedish men and women: baseline results from the WOLF Study. *Journal of Epidemiology and Community Health*, 52, 540-547.

Peter, R. & Siegrist, J. (1997). Chronic work stress, sickness absence, and hypertension in middle managers: General or specific sociological explanations? *Social Science and Medicine*, 45, 1111-1120.

Phillips, S., Sen, D. & McNamee, R. (2008). Risk factors for work-related stress and health in head teachers, *Occupational Medicine*, 58, 584-586.

Pickvance, S. (2007). Just how good is work for your health? *Occupational Health at Work*, 3, 11-15.

Pietikäinen, S. (2003). Indigenous identity in print: Representations of the Sami in news discourse, *Discourse and Society*, 14, 581-609.

Pilkington, A., Mulholland, R., Cowie, H., Graham, M. & Hutchinson, P. (2001). *Baseline Measurement for the Evaluation of the Work-Related Stress Campaign*, Sudbury: HSE Books.

Price, A. (2006). Individual stress management: Adapting the Health and Safety Executive's stress management standards for individual case management, *Occupational Health at Work*, 3, 26-29.

Quick, J.C. (1996). Advancing public policy, social science and biomedical inquiry: State of the art reviews IV, *Journal of Occupational Health Psychology*, 1, 347-348.

Rabkin, J. (1993). Stress and psychiatric disorders, in L. Goldberger & S. Breznitz (Eds.), *Handbook of Stress: Theoretical and Clinical Aspects* (2nd ed.), New York: The Free Press.

Randall, R. (2002). *Organisational Interventions to Manage Work-Related Stress: Using Organisational Reality to Permit and Enhance Evaluation*, Unpublished PhD Thesis, University of Nottingham, UK.

Randall, R., Cox, T. & Griffiths, A. (2007). Participants' accounts of a stress management intervention, *Human Relations*, 60, 1181-1209.

Random House Unabridged Dictionary (2006). Retrieved February 19, 2007, from Dictionary.com website.

Raymond, J., Wood, D. & Patrick, W. (1990). Psychology training in work and health, *American Psychologist*, 45, 1159-1161.

Rebergen, D., Bruinvels, D., van der Beek, A. & Mechelen, M. (2007) *RCT on RTW of Employees with Mental Health Problems: Is a Guideline for Occupational Physicians more Effective than Referral to a Psychologist?* Paper presented at the 13th European Congress of Work and Organisational Psychology, Stockholm, Sweden, May 9-12.

Reddy, M. (2002). *Behavioural Risk Analysis*. Retrieved July 4, 2003, from www.icasgroup.com/news_events/archive/downloads.html

Rial-Gonzalez, E. (2000). *Risk Assessment for Work-Related Stress: A Development Study with UK Hospital-Based Doctors*, Unpublished doctoral thesis, University of Nottingham.

Rick, J., Thomson, L., Briner, R., O'Regan, S. & Daniels, K. (2002). *Review of Existing Supporting Scientific Knowledge to Underpin Standards of Good Practice for Key Work-Related Stressors – Phase 1*, Sudbury: HSE Books.

Riffe, D., Lacy, S. & Fico, F.G. (2005). *Analyzing media messages: Using quantitative content analysis in research*, Mahwah, NJ: Lawrence Erlbaum.

Roberts-Yates, C. (2003). The concerns and issues of injured workers in relation to claims/injury management and rehabilitation: The need for new operational frameworks, *Disability and Rehabilitation*, 25, 898–907.

Robson, C. (2002). *Real World Research* (2nd Ed.). Oxford: Blackwell Publishing.

Roelen, C., Koopmans, P., de Graaf, J., van Zandbergen, W. & Groothoff, J. (2007). Job demands, health perception and sickness absence, *Occupational Medicine*, 57, 499-504.

Russell, C. (2004). Personal injury update, *New Law Journal*, 154, 763-764.

Russell, G. & Roach, S. (2001). *Stress, Compensation and the General Practitioner*, Perth: Western Australia, Workers' Compensation and Rehabilitation Commission.

Russell, G. & Roach, S. (2002). Occupational stress: A survey of management in General Practice, *Medical Journal of Australia*, 176, 367-370.

Sainsbury Centre for Mental Health (2007). *Mental Health at Work: Developing the Business Case*, London: Author.

Sainsbury, R., Irvine, A., Aston, J., Wilson, S., Williams, C. & Sinclair, A. (2008). *Mental Health and Employment*, Norwich, UK: Her Majesty's Stationery Office.

Sauter, S., Brightwell, W.S., Colligan, M.J. et al., (2002). *The Changing Organization of Work and the Safety and Health of Working People*, Cincinnati: National Institute for Occupational Safety and Health.

Schaufeli, M. (2004). The future of occupational health psychology, *Applied Psychology: An International Review*, 53, 502-517.

Schnall, P., Belkic, K., Landsbergis, P. & Baker, D. (Eds.) (2000). The workplace and cardiovascular disease, *Occupational Medicine: State of the Art Reviews*, 15, 1-334.

Selye, H. (1950). *Stress*, Montreal: Acta Incorporated.

Selye, H. (1956). *Stress of Life*. McGraw-Hill, New York.

Semmer, N. (2003). Individual differences, work stress and health, in M. Schabracq, J. Winnubst & C. Cooper (Eds.), *Handbook of Work and Health Psychology* (pp. 83-120). New York: John Wiley.

Semmer, N., Grebner, S. & Elfering, A. (2004). Beyond self-report: using observational, physiological and situational-based measures in research on occupational stress, In P. Perrewe & D. Ganster (Eds.), *Emotional and*

Physiological Processes and Positive Intervention Strategies, Research in Occupational Stress, Vol. 3., Elsevier.

Semmer, N. & Zapf, D. (1989). Validity of various methods of measurement in job analysis, in K. Landau and W. Rohmert (Eds.), *Recent Developments in Job Analysis*, London: Taylor and Francis.

Semmer, N., Zapf, D. & Greif, S. (1996). Shared job strain: A new approach for assessing the validity of job stress measures, *Journal of Occupational and Organizational Psychology*, 69, 293-310.

Seymour, L. & Grove, B. (2005). *Workplace Interventions for People with Common Mental Health Problems: Evidence Review and Recommendations*, London: British Occupational Health Research Foundation.

Siegrist, J. (1996). Adverse health effects of high effort-low reward conditions at work. *Journal of Occupational Health Psychology*, 1, 27-43.

Siegrist, J. (2001). A theory of occupational stress, In J. Dunham (Ed.), *Stress in the Workplace: Past, Present and Future*, London: Whurr Publishers.

Siegrist, J. (2002). Effort-reward imbalance at work and health. In, P. Perrewe & D. Ganster (Eds.), *Research in Occupational Stress and Well Being, Vol. 2: Historical and Current Perspectives on Stress and Health*, New York: JAI Elsevier.

Siegrist, J., & Peter, R. (1996). *Measuring effort-reward imbalance at work: Guidelines*. Dusseldorf: Heinrich Heine University.

Siegrist, J. & Rodel, A. (2006). Work stress and health risk behavior, *Scandinavian Journal of Work, Environment and Health*, 32, 473-481.

Singleton, N., Bumpstead, R., O'Brien, M., Lee, A. & Meltzer, H. (2001). *Psychiatric morbidity among adults living in private households, 2000*. London: The Stationery Office.

Smith, A. (2001). Perceptions of stress at work, *Human Resource Management Journal*, 11, 74-86.

Smith, A., Johal, S., Wadsworth, E., Davey Smith, G. & Peters, T. (2000). *The Scale of Perceived Stress at Work: The Bristol Stress and Health at Work Study. Contract Research Report 265/2000*, Sudbury: HSE Books.

Smith, A., Wadsworth, E., Moss, S. & Simpson, S. (2004). *The Scale and Impact of Drug Use By Workers*, Sudbury: HSE Books.

Smith, I. (2004). Employment law brief, *New Law Journal*, 154, 887-889.

Sosik, J. & Godshalk, V. (2000). Leadership styles, mentoring functions received, and job-related stress: A conceptual model and preliminary study, *Journal of Organizational Behavior*, 21, 365-390.

Sparks, K. & Cooper, C. (1999). Occupational Differences in the Work-Strain Relationship: Towards the Use of Situation-Specific Models, *Journal of Occupational and Organizational Psychology*, 72, 219-28.

Spector, P. (2001). Research methods in industrial and organisational psychology: Data collection and data analysis with special consideration to international issues, in N. Anderson, D. Ones, H. Sinangil & C. Viswesvaran (Eds.), *Handbook of Industrial, Work and Organisational Psychology, Volume 1*, London: Sage Publications.

Spector, P. (2006). Method variance in organizational research: Truth or urban legend, *Organizational Research Methods*, 9, 221-232.

Spector, P.E., Fox, S. & Van Katwyk, P.T. (1999). The role of negative affectivity in employee reactions to jobs: Nuisance effect or substantive effect? *Journal of Occupational and Organizational Psychology*, 72, 205-218.

Spector, P. & Jex, S. (1998). Development of four self-report measures of job stressors and strain: Interpersonal Conflict at Work Scale, Organizational

Constraints Scale, Quantitative Workload Inventory, and Physical Symptoms Inventory, *Journal of Occupational Health Psychology*, 3, 365-367.

Spector, P.E., Jex, S.M. & Chen, P.Y. (1995). Personality traits as predictors of objective job characteristics, *Journal of Organizational Behavior*, 16, 59-65.

Spector, P., Zapf, D., Chen, P. & Frese, M. (2000). Why negative affectivity should not be controlled in job stress research: Don't throw the baby out with the bathwater, *Journal of Organizational Behavior*, 21, 79-95.

Spitzmüller, C., Holz, M., Ohly, S., Werner, C. & Zapf, D. (2007). *The Role of Trait Negative Affect in Social Stressors-Strain Relations*, Paper presented at the 13th European Congress of Work and Organisational Psychology, Stockholm, Sweden, May 9-12.

Sprince, A (1998) . Negligently inflicted psychiatric damage: A medical diagnosis and prognosis, *Legal Studies*, 18, 59-77.

Stamou, A. (2001). The representation of non-protestors in a student and teacher protest: A critical discourse analysis of news reporting in a Greek newspaper, *Discourse and Society*, 12, 653-680.

Stansfeld, S. & Candy, B. (2006). Psychosocial work environment and mental health – a meta analytic review, *Scandinavian Journal of Work, Environment and Health*, 32, 443-462.

Stansfeld, S.A., Fuhrer, R., Shipley, M. & Marmot, M. (1999). Work characteristics predict psychiatric disorder: Prospective results from the Whitehall II study, *Occupational and Environmental Medicine*, 56, 302-307.

Stansfeld, S. & Marmot, M. (Eds.) (2002). *Stress and the Heart*, London: BMJ Books.

Stansfeld, S., Rael, E., Head, J., Shipley, M. & Marmot, M. (1997). Social support and psychiatric disorder in the Whitehall II study, *Journal of Psychosomatic Research*, 43, 73-81.

Stansfeld, S., Woodley-Jones, D., Rasul, F., Head, J., Clarke, S. & Mackay, C. (2004). *Occupational Health Decennial Supplement 2004: Work-Related Stress and Related Disorders*, retrieved 4th January, 2008, from <http://www.hse.gov.uk/statistics/causdis/stress/workrelatedstress.pdf>

Sturges, J. & Hanrahan, K. (2004). Comparing telephone and face-to-face qualitative interviewing: A research note, *Qualitative Research*, 4, 107-118.

Suff, P. (2007). BT promotes positive mentality, *Occupational Health at Work*, 3, 16-19.

Sunderland, J. (2006). 'Parenting' or 'mothering'? The case of modern childcare magazines, *Discourse and Society*, 17, 503-527.

Taris, T. (2006). Bricks without clay: On urban myths in occupational health psychology, *Work & Stress*, 20, 99-104.

Tasho, W., Jordan, J. & Robertson, I. (2005). *Case Study: Establishing the Business Case for Investing in Stress Prevention Activities and Evaluating Their Impact on Sickness Absence Levels*, Sudbury: HSE Books.

Taylor, S., Fedoroff, I., Koch, W., Thordarson, D., Fecteau, G. & Nicki, R. (2001). Posttraumatic stress disorder arising after road traffic collisions: Patterns of response to cognitive-behavior therapy, *Journal of Consulting and Clinical Psychology*, 69, 541— 551.

Tehrani, N., MacIntyre, B., Maddock, S., Shaw, R. & Illingworth, R. (2007). Rehabilitation: Maintaining a healthy workforce, in J. Houdmont & S. McIntyre (Eds.), *Occupational Health Psychology: European Perspectives on Research, Education and Practice (Vol. 2)*, Maia, Portugal: ISMAI Publishers.

Tennant, C. (2001). Work-related stress and depressive disorders, *Journal of Psychosomatic Research*, 51, 697-704.

The Guardian (1999). S. Millar. *Council pays £67,000 for stress injury*. 6th July.

The Guardian (2000). V. Dodd. *£203,000 award for stress at gypsy site*. 11th January.

The Guardian (2001). W. Woodward. *Bullied teacher wins £100,000 for stress caused by workload*. 9th March.

The Guardian (2002). C. Dyer. *Judges curb stress cases*. 6th February.

The Guardian (2003). A. Wade and C. Dyer. *Even when she was being nice I felt terrified*, 25 November.

The Guardian (2004). C. Dyer. *Lords limit liability for stress at work*. 2nd April.

The Guardian (2004). S. Manzoor. *Let's stop stressing about stress*. 3rd November.

The Guardian (2005). B. Saunders. *The inside track*. 10th January.

The Independent (2000). *Ex-manager wins £175,000 for stress*, 22 February.

The Independent (2000). J. Judd. *Teacher awarded £250,000 over stress illnesses*. 5 December.

The Independent (2001). C. Gray. *Social worker given £140,000 for 'stress'*. 5th September.

The Independent (2002). R. Verkaik. *Judges issue warning over stress payouts to workers*. 6th February.

The Sun (1996). *£175,000 for victim of stress*. 27 April.

The Sun (1999). A. Parker. *£67,000 for stress of 18hr a week job*. 6 July.

The Sun (2000). J. Scott. *Fury at gypsy's £203,000 stress payout*. 11 January.

The Sun (2000). C. Sigley. *Fury over £175,000 payout for job stress*, 22 February.

The Sun (2001). J. Scott. *Care boss wind £140,000 after job stress 'ruined life'*. 5 September.

The Sun (2002). A. Lafferty. *Don't bang on a bung if you're stressed-out*. 8 March.

The Sun (2002). *£200,000 payouts for stress KO'd*. 6 February.

Thomson, L., Rick, J., Briner, R., Daniels, K. & O'Regan, S. (2002). Evidence based practice and systematic reviews: A methodology for identifying the best available evidence in relation to policy questions, in C. Weikert, E. Torkelson and J. Pryce (Eds.), *Occupational Health Psychology: Empowerment, Participation and Health at Work*, Nottingham: I-WHO Publications.

Torkelson, E. & Muhonen, T. (2002). Perceived stress and control among women and men at different organisational levels, in C. Weikert, E. Torkelson and J. Pryce (Eds.), *Occupational Health Psychology: Empowerment, Participation and Health at Work*, Nottingham: I-WHO Publications.

Trades Union Congress (2000). Nothing but a cop out: Unions slam stress law snub, *Hazards*, 71, August.

Trades Union Congress (2004). *Focus on Health and Safety - Trade Union Trends Survey 04/03: TUC Biennial Survey of Safety Reps 2004*, London: Trades Union Congress.

Trades Union Congress (2005). A little Compensation, *Hazards*, 90.

Trades Union Congress (2006a). *Focus on Health and Safety - Trade Union Trends Survey 06/02: TUC Biennial Survey of Safety Reps 2006*, London: Trades Union Congress.

Trades Union Congress (2006b). *Personal Injury Claims: Proposals for Change*. Retrieved, 23 March, 2007, from <http://www.tuc.org.uk/extras/pi-process.pdf>

Trades Union Congress (2007). TUC Evidence to the Dame Carol Black review of the health of Britain's working age population, Retrieved, 23 November, 2007, from http://www.tuc.org.uk/h_and_s/tuc-14004-f0.cfm

Trimble, M. (1995). Medicine and the law: Conflict or debate, *Journal of Psychosomatic Research*, 39, 671-674.

Tse, J., Flin, R. & Mearns, K. (2007). Facets of job effort in bus driver health: Deconstructing 'effort' in the Effort-Reward Imbalance model, *Journal of Occupational Health Psychology*, 12, 48-62.

Tsutsumi, A. & Kawakami, N. (2004). A review of empirical studies on the model of effort-reward imbalance at work: reducing occupational stress by implementing a new theory, *Social Science and Medicine*, 59, 2335-2359.

Tsutsumi, A., Kayaba, K., Theorell, T. & Siegrist, J. (2001). Association between job stress and depression among Japanese employees threatened by job loss in a comparison between two complimentary job stress models, *Scandinavian Journal of Work, Environment and Health*, 27, 146-153.

Tucker, J., Sinclair, R., Mohr, C., Adler, A., Thomas, J. & Salvi, A. (2008). A temporal investigation of the direct, interactive, and reverse relations between demand and control and affective strain, *Work & Stress*, 22, 81-95.

Tudor, O. (2002). Stress in Great Britain, *European Trade Union Technical Bureau for Health and Safety, Newsletter Special Issue: Stress at Work*, <http://www.etuc.org/tutb/uk/pdf/newsletter-20.pdf>

Tuomi, K., Ilmarinen, J., Jahkola, A., Katajarinne, L. & Tulkki, A. (1998). *Work Ability Index* (2nd Ed.) Helsinki: Finnish Institute of Occupational Health.

Uhmann, S. (2007). *On the Beaten Track: What are Promising Variations on and Extensions to the Job Demands-Control Model?* Paper presented at the 13th European Congress of Work and Organisational Psychology, Stockholm, Sweden, May 9-12.

Vahtera, J., Kivimäki, M., Pentti, J. & Theorell, T. (2000). Effect of change in the psychosocial work environment on sickness absence: A seven year follow up of initially healthy employees, *Journal of Epidemiology and Community Health*, 54, 484-493.

Van Der Doef, M. & Maes, S. (1999). The job demand-control (-support) model and psychological well-being: A review of 20 years of empirical research, *Work and Stress*, 13, 87-114.

van Rhenen, W., van Dijk, F., Schaufeli, W. & Blonk, R. (2008). Distress or no distress, that's the question: A cutoff point for distress in a working population, *Journal of Occupational Medicine and Toxicology*, 3, 3-11.

van Vegchel, N., de Jonge, J., Bosma, H. & Schaufeli, W. (2005). Reviewing the effort-reward imbalance model: drawing up the balance of 45 empirical studies, *Social Science and Medicine*, 60, 1117-1131.

van Vegchel, N., de Jonge, J., Meijer, T. & Hamers, J. (2001). Different effort constructs and effort-reward imbalance: effects on employee well-being in ancillary health care workers, *Journal of Advanced Nursing*, 34, 128-136.

van Veldhoven, M., Taris, T., de Jonge, J. & Broersen, S. (2005). The relationship between work characteristics and employee health and well-being: How much complexity do we really need? *International Journal of Stress Management*, 12, 3-28.

Verbeek, J. (2007). More systematic reviews needed to improve occupational health, *Scandinavian Journal of Work, Environment and Health*, 33, 81-83.

Viikari-Juntura, E. and Burdof, A. (2007). Focus and future of occupational health journals, *Scandinavian Journal of Work, Environment and Health*, 33, 241-243.

Vingård, E., Bengtsson, F., Waldenström, M., Ekenvall, L., Ahlberg, G., Nise, G. & Svartengren, M. (2007). *Healthy Companies - has Rehabilitation Measures for Long Term Sick Listed Anything to do with that?* Paper presented at the 13th European Congress of Work and Organisational Psychology, Stockholm, Sweden, May 9-12.

Vonk, E. (2006). *Research Techniques for Clinical Social Workers*, New York: Columbia University Press.

Waddell, G. & Burton, K. (2006). *Is Work Good for your Health & Well-Being?* London: TSO.

Wadsworth, E., Dhillon, K., Shaw, C., Bhui, K., Stansfeld, S. & Smith, A. (2007). Racial discrimination, ethnicity and work stress, *Occupational Medicine*, 57, 18-24.

Wainright, D. & Calnan, M. (2002). *Stress: The Making of a Modern Epidemic*, Open University Press.

Wallis, A. & Dollard, M. (2008). Local and global factors in work stress: The Australian dairy farmer exemplar, *Scandinavian Journal of Work, Environment and Health Supplements* (6), 66-74.

Wang, J. (2005). Work stress as a risk factor for major depressive episode(s), *Psychological Medicine*, 35, 865-871.

Wang, J. & Pattern, S. (2004). Perceived work stress and major depressive episodes in a population of employed Canadians over 18 years of age, *Journal of Nervous Mental Disorders*, 192, 160-163.

Watson, D., Clark, L.A. & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: the PANAS scales, *Journal of Personality and Social Psychology*, 54, 1063-1070.

Watson, T. (1995). Rhetoric, discourse and argument in organizational sensemaking: A reflexive tale, *Organization Studies*, 16, 805-21.

Weber, R. (1990). *Basic Content Analysis*, Beverly Hills, CA: Sage.

Webster, S., Buckley, P. & Rose, I. (2007). *Psychosocial Working Conditions in Britain in 2007*, Sudbury: HSE Books.

Wessely, S. (1995). Liability for psychiatric illness, *Journal of Psychosomatic research*, 39, 659-669.

Whatmore, L., Cartwright, S. & Cooper, C. (1999). United Kingdom: Evaluation of a stress management programme in the public sector, in M. Kompier & C. Cooper (Eds.), *Preventing Stress, Improving Productivity* (pp. 149-174). New York: Routledge.

Wiggins, J. (1995). Assessing occupational stress-related disorders, in L. Murphy, J. Hurrell, S. Sauter & G. Keita (Eds.), *Job Stress Interventions*, American Psychological Association.

World Health Organisation (1985). *Identification and Control of Work-related Disease*. Geneva: WHO Technical report series 714, 7-11.

World Health Organisation. (1992). *The ICD-10 classification of mental and behavioural disorders: Diagnostic criteria for research*. WHO: Geneva.

Wren, B., Schwartz, A., Allen, C., Boyd, J., Gething, N., Hill-Tout, J., Jennings, T., Morrison, L. & Pullen, A. (2006). Developing occupational health psychology services in healthcare settings, in S. McIntyre & J. Houdmont (Eds), *Occupational Health Psychology: European Perspectives on Research, Education and Practice (Vol. 1)*, Maia, Portugal: ISMAI Publications.

Yin, R. (1994). *Case study research: Design and methods* (2nd edn.). Thousand Oaks, CA: Sage.

Zapf, D. (1989). *Self-Report and Observation Rating in Psychological Job Analysis*, Gottingen, Germany: Hogrefe.

Zindani, J. & Korn, A. (2004). PI and clinical negligence: stressing the point, *The Lawyer*, June 21, 25.

9. APPENDICES

I – Systematic review methodology

II - Stakeholder interview schedule

III – Hale LJ’s Practical Propositions on the interpretation and application of the ordinary principles of employer liability in personal injury claims for work-related stress

IV – Taxonomy of debates pertaining to the case definition for work-related stress applied in personal injury litigation (from Buchan, 2001)

Appendix I

Systematic Review Methodology

The review of the literature presented in chapter 2 utilised a systematic review methodology developed by Thomson, Rick, Briner, Daniels & O'Regan (2002) for the identification of the best available evidence in relation to policy questions. The systematic review methodology was originally developed as part of a research study commissioned by the British Health and Safety Executive that concerned the identification of the best available evidence on the impact of certain psychosocial hazards and work-related stress interventions on employees (Rick, Thomson, Briner, O'Regan & Daniels, 2002).

The systematic review methodology and its development is described in detail in Thomson et al (2002). It can be summarised as consisting of four stages:

- Identification of the literature for review, involving
 - electronic keyword searches of relevant databases, and
 - maintenance of a database to record references and their progress through the review process
- Sifting the literature against relevance and quality criteria, involving
 - an initial assessment of the relevance and quality of each document with a view towards identifying those that will proceed to the next stage, and
 - the development of sift criteria to reflect the research question
- Reviewing the relevant literature for evidence, involving
 - the development of review criteria to extract the detailed findings from each document and a review proforma upon which to enter the findings and transfer of findings into a database
- Analysing the review results, involving
 - extraction of findings from the database in order to describe the available evidence

Appendix II

Stakeholder Interview Schedule



Participant ID: ____

INTERVIEW SCHEDULE

CONFIDENTIAL

DEFINING A CASE OF WORK- RELATED STRESS

Introduction

Good morning/afternoon, as you are aware, the aim of this interview is to identify your views, and those of the stakeholder group you represent, regarding the notion of defining a case of work-related stress. This interview is being conducted as part of a research project commissioned by the British Health and Safety Executive to explore the feasibility of the development of a case definition for work-related stress that is deemed acceptable by stakeholders for large-scale survey administration. We are interested in identifying, from the perspective of potential users of any derived case definition, the practical and conceptual issues involved in defining a case of work-related stress. The interview should last approximately one hour. It will follow a semi-structured format. The interview is entirely private and confidential and your name will not be linked to anything you say here. Thank you.

Before we begin, do you have any questions?

1. Stakeholder group

(I) To which of the following stakeholder groups do you most closely align yourself?

Employer/Employer Representative	
Trades union	
Occupational health practitioner	
Occupational health psychologist	
Clinical or counselling psychologist	
Insurer	
Legal professional	
Regulator	
Other. Describe:	

2. Existing case-definitions of work-related stress

Can we start by discussing your own experiences of defining cases of work-related stress?

(I) In your professional practice, for what purposes might you wish to define and identify a case of work-related stress?

(II) Which case definitions do you employ or refer to in your professional practice?

(III) Can you describe how do you define a case of work-related stress?

(IV) What information is collected when making a case assessment?

(V) How is the information collected?

(VI) Can you please describe what you understand by the term 'work-related stress'?

3. Case definition elements

As you are aware, a central aim of this project is to investigate the feasibility of the development of a case definition for work-related stress that is deemed acceptable across stakeholder groups for application in large-scale workforce surveys. I would now like to ask you some questions about the nature of such a possible case definition.

(I) What factors do you think are *essential* for inclusion in a survey-based case definition?

(II) What factors do you think are *desirable* for inclusion in a survey-based case definition?

(III) What factors should explicitly not be included?

(IV) If a case definition were developed that incorporated only the factors you have mentioned today, what practical uses do you think it might have?

(V) What opportunities might the creation of such a case definition present?

(VI) What problems might the creation of such a case definition present?

(VII) Do you think it might be possible for stakeholder groups to agree on a case definition as it applies to work-related stress?

(VIII) What barriers to agreement do you perceive?

4. Other comments

(I) I have covered the specific areas I wanted to ask you about. Is there anything else about those areas that we might have left out?

(II) Is there anything else that you would like to add?

(III) Finally, can you name any other experts on work-related stress that you would recommend should be included in this study?

Thank you very much for your help.

Appendix III

Hale LJ's Practical Propositions on the interpretation and application of the ordinary principles of employer liability (the case definition) in personal injury claims for work-related stress

(as set out in *Hatton v Sutherland* [2002] 2 All ER 1)

(1) There are no special control mechanisms applying to claims for psychiatric (or physical) illness or injury arising from the stress of doing the work the employee is required to do (para 22). The ordinary principles of employer's liability apply (para 20).

(2) The threshold question is whether this kind of harm to this particular employee was reasonably foreseeable (para 23): this has two components (a) an injury to health (as distinct from occupational stress) which (b) is attributable to stress at work (as distinct from other factors) (para 25).

(3) Foreseeability depends upon what the employer knows (or ought reasonably to know) about the individual employee. Because of the nature of mental disorder, it is harder to foresee than physical injury, but may be easier to foresee in a known individual than in the population at large (para 23). An employer is usually entitled to assume that the employee can withstand the normal pressures of the job unless he knows of some particular problem or vulnerability (para 29).

(4) The test is the same whatever the employment: there are no occupations which should be regarded as intrinsically dangerous to mental health (para 24).

(5) Factors likely to be relevant in answering the threshold question include:

(a) The nature and extent of the work done by the employee (para 26).

Is the workload much more than is normal for the particular job? Is the

work particularly intellectually or emotionally demanding for this employee? Are demands being made of this employee unreasonable when compared with the demands made of others in the same or comparable jobs? Or are there signs that others doing this job are suffering harmful levels of stress? Is there an abnormal level of sickness or absenteeism in the same job or the same department?

(b) Signs from the employee of impending harm to health (paras 27 and 28). Has he a particular problem or vulnerability? Has he already suffered from illness attributable to stress at work? Have there recently been frequent or prolonged absences which are uncharacteristic of him? Is there reason to think that these are attributable to stress at work, for example because of complaints or warnings from him or others?

(6) The employer is generally entitled to take what he is told by his employee at face value, unless he has good reason to think to the contrary. He does not generally have to make searching enquiries of the employee or seek permission to make further enquiries of his medical advisers (para 29).

(7) To trigger a duty to take steps, the indications of impending harm to health arising from stress at work must be plain enough for any reasonable employer to realise that he should do something about it (para 31).

(8) The employer is only in breach of duty if he has failed to take the steps which are reasonable in the circumstances, bearing in mind the magnitude of the risk of harm occurring, the gravity of the harm which may occur, the costs

and practicability of preventing it, and the justifications for running the risk (para 32).

(9) The size and scope of the employer's operation, its resources and the demands it faces are relevant in deciding what is reasonable; these include the interests of other employees and the need to treat them fairly, for example, in any redistribution of duties (para 33).

(10) An employer can only reasonably be expected to take steps which are likely to do some good: the court is likely to need expert evidence on this (para 34).

(11) An employer who offers a confidential advice service, with referral to appropriate counselling or treatment services, is unlikely to be found in breach of duty (paras 17 and 33).

(12) If the only reasonable and effective step would have been to dismiss or demote the employee, the employer will not be in breach of duty in allowing a willing employee to continue in the job (para 34).

(13) In all cases, therefore, it is necessary to identify the steps which the employer both could and should have taken before finding him in breach of his duty of care (para 33).

(14) The claimant must show that that breach of duty has caused or materially contributed to the harm suffered. It is not enough to show that occupational stress has caused the harm (para 35).

(15) Where the harm suffered has more than one cause, the employer should only pay for that proportion of the harm suffered which is attributable to his wrongdoing, unless the harm is truly indivisible. It is for the defendant to raise the question of apportionment (paras 36 and 39).

(16) The assessment of damages will take account of any pre-existing disorder or vulnerability and of the chance that the claimant would have succumbed to a stress related disorder in any event (para 42).

Appendix IV

**Taxonomy of debates pertaining to the case definition for
work-related stress applied in personal injury litigation
(from Buchan, 2001)**

[1] General issues of foreseeability

[1.1] Did the type of work, or the actual work, the claimant was required to do give rise to a foreseeable risk of psychiatric injury?

[2] General issues of breach

[2.1] If the type of work, or the actual work, the claimant was required to do gave rise to a foreseeable risk of psychiatric injury, did the defendants take reasonable steps to alleviate the risks?

[2.2] In deciding what steps were reasonable:

[2.2.1] what steps should have reasonably have been taken?

[2.2.2] when should they have been taken?

[2.2.3] what effect would they have had?

[3] Claimant-specific issues of foreseeability

[3.1] Did the claimant show signs of or give any indication of his/her actual or impending psychiatric condition which ought to have been known by the defendants?

Continued overleaf...

Appendix II continued...

[4] Claimant-specific issues of breach

[4.1] If the claimant showed signs of or give any indication of his/her actual or impending psychiatric condition which ought to have been known by the defendants, did the defendants take reasonable steps to avert the risk of psychiatric injury?

[4.2] In deciding what steps were reasonable:

[4.2.1] when and in what form did the claimant show such signs?

[4.2.2] when and in what way did the claimant complain (if any)?

[4.2.3] what steps should reasonably have been taken?

[4.2.4] when should they have been taken?

[4.2.5] what effect would they have had?

[5] Causation

[5.1] Has the claimant suffered from an identifiable psychiatric illness?

[5.2] If so, was that illness caused or materially contributed to by his or her work with the defendant?