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Management competencies for preventing and reducing stress at work

Identifying and developing the management behaviours necessary to implement the HSE Management Standards

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Research Report

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Identifying and developing the management behaviours necessary to implement the HSE Management Standards

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This report presents the findings of the first phase of a research project which aimed to identify the specific management behaviours associated with the effective management of stress at work and to build a management competency framework for preventing and reducing stress at work. The project also aimed to identify those behaviours associated with each of the six HSE Management Standards and those behaviours associated with the implementation of the Standards. A final aim was to explore the possible integration of the emergent competency framework into existing management competency frameworks.

A qualitative, multi-method approach was taken involving 216 employees, 166 line managers and 54 HR practitioners working within the five HSE priority sectors (Education, Finance, Local Government, Central Government and Healthcare). The emergent 'Management Competencies for preventing and reducing stress at work' framework identified 19 competencies relating to the management of stress in employees. These were then compared to the HSE Management Standards and a number of general management frameworks. Conclusions are discussed in light of implications for research, policy makers, employers and line managers.

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EXECUTIVE SUMMARY

Objectives of the study

The three objectives of this study were:

a) To identify the specific management behaviours associated with the effective management of stress at work and build a management competency framework for preventing and reducing stress at work.
b) Within the emerging competency framework, to identify those behaviours that are associated with each of the six Management Standards and those behaviours that are associated with the implementation of the HSE Management Standards e.g. management approaches that underlie all the Management Standards; and
c) To explore the possible integration of the emerging competency framework into existing management competency frameworks.

Background

A comprehensive literature review was conducted to explore existing knowledge about the link between manager behaviour and employee well-being. The review demonstrated that there is evidence that manager behaviour is an important determinant of employee stress levels. It also revealed an increasing interest in managers' impact on well-being, with researchers beginning to unpack the specific behaviours that underpin constructs such as manager support. However, whilst numerous management behaviours have been empirically linked to employee well-being and the reduction of strain, particularly those that involve individualised consideration and/or interpersonally fair treatment, a definitive list of the management behaviours specific to the management of stress/well-being in employees has not previously been developed.

In order to address the gap in research, this study focused on defining the relevant management behaviours. A competency approach was adopted to define the collection of skills and behaviours required by an individual manager to prevent and reduce stress in their staff. Competencies articulate both the expected outcomes of an individual's efforts, and the manner in which these activities are carried out. The benefits and opportunities afforded by using a competency framework for stress management are three fold: it puts stress management into a language or format that is accessible and 'business-friendly'; it allows a clear specification of the expectations upon managers to manage stress in others; and importantly, it also allows for the development of interventions to ensure managers have the appropriate skills, abilities and behaviours to manage employee stress effectively and to implement the HSE Management Standards.

Research Methodology

A qualitative approach was used to elicit the behaviours associated with management of stress in employees. Participants included 216 employees, 166 line managers and 54 HR practitioners working within the five HSE priority sectors: Education, Healthcare, Central Government, Local Government and Finance. Data gathering included: structured one-to-one interviews incorporating the critical incident technique; workshops; and written exercises.

The interviews suitable for analysis (209 employees and 160 managers) were transcribed and content analysis was used to extract themes and develop a coding framework. Following completion of content analysis, an emergent competency framework was developed. Frequency analysis was used to explore the proportion of participants who had mentioned particular competencies in the interviews and the percentage frequency of mentions. Separate analyses were conducted to identify manager and employee differences and sector differences. Behavioural indicators generated from the written exercises completed by interviewees and the workshop exercises completed HR professionals were extracted. Content analysis was used to fit the data into the existing framework.

The emergent Management Competencies for Preventing and Reducing Stress at Work framework was compared to the HSE Management Standards to identify commonalities and discrete components related to the effective management of stress at work. Three further mapping exercises were conducted to compare the emergent framework with: a) existing management frameworks; b) sector specific frameworks; and c) national frameworks.

Main Findings of the Research

The main findings of the research are reported in light of the three initial objectives of the study a) the competency framework itself, b) mapping onto the Management Standards and c) mapping onto other management frameworks and the possible integration of the framework into existing people management frameworks.

Main findings regarding the competency framework

- Content analysis of the interview data revealed 19 stress management competencies and for all except one of these ('Seeking Advice') provided both positive and negative behavioural indicators. The set of competencies was found to be consistent across the sample: the same competencies were referred to by managers and employees, and by interviewees from all five sectors covered.

- When considering data gathered from two alternative sources (HR exercise and written exercise), a very similar set of competencies emerged, except that two of the competencies ('Health and Safety' and 'Seeking Advice') were not referred to. These two competencies were also the two referred to by the fewest participants in the interviews, demonstrating a consistent pattern of responses across participant groups and data sources.

- Three competencies, 'Managing Workload and Resources', 'Participative Approach' and 'Communication', were mentioned most frequently across all data sources (interviews, written exercise and HR exercise). These were also the most frequently mentioned competencies for both managers and employees.

- Analysis highlighted differences between the frequency of positive and negative behavioural indicators within each competency. Overall, 16 of the competencies were more frequently mentioned in terms of positive behaviour than negative behaviour, the exceptions being 'Acting with Integrity', 'Expressing and Managing Own Emotions' and 'Managing Conflict'. It appears therefore that to achieve positive stress management outcomes, while the majority of the competencies appear more important in terms of the presence of positive behaviour, a minority may be more important in terms of the absence of negative behaviour.

- When examining positive and negative indicators referred to by managers and employees, further differences were revealed. Although, in general, similar numbers of managers and employees referred to positive examples of each competency (for instance 61% of employees and 64% of managers interviewed referred to positive indicators of 'Managing workload and resources' as examples of effective stress management behaviour), when examining percentage frequency of positive and negative behaviours, there is a wide discrepancy. The percentage frequency of mentions of positive indicators was much higher for managers than employees on each competency. Conversely, employees mentioned many more negative indicators of each competency than managers.

Mapping onto the HSE Management Standards

- There was high agreement between the researchers' mapping, the mapping generated by employees and managers in the written exercise, and by HR professionals' mapping in the workshop exercise, indicating a degree of consensus about those behaviours relevant for each of the Management Standards.

- Four competencies identified in the research appeared to sit outside of the six Management Standard areas. These were 'Knowledge of Job' (referring to a line manager's understanding of the task his/her team performs), 'Taking Responsibility' (referring to leading from the front, taking a hands-on approach), 'Empathy' (seeing employees as individuals, with personal lives, stress levels and needs) and 'Seeking Advice' (from occupational health, HR and other managers).

- Certain competencies mapped onto more than one Management Standard area, reflecting a degree of overlap in management behaviour. It may be, therefore, that individual competencies have an impact on more than one HSE Management Standard area.

- The 'Development' competency was variously mapped onto the standards of 'Control', 'Support' and 'Role'. Although 'Development' is an important area, it does not seem to be seen by employees, managers or HR professionals as a 'Control' issue, contrary to the wording of the Management Standard for Control.

Mapping onto other management frameworks

- Mapping the emergent 'Management Competencies for Preventing and Reducing Stress at Work' framework onto other management competency frameworks revealed some important parallels between this and existing frameworks that specify what managers are expected to do. The comparison with general management frameworks (using the Leaders Behaviour Descriptor Questionnaire, Great 8, Transformational Leadership Questionnaire (public and private forms) and Multifactor Leadership Questionnaire) and sector specific frameworks both revealed a similar picture. All competencies were included in at least one of the frameworks, but no framework covered all the competencies. Three of the competencies appeared in all ten comparison frameworks ('Participative approach', 'Acting with Integrity' and 'Communication').

- Mapping onto National Frameworks (using the Management Standards Framework, Investors in People and the DTI Inspirational Leadership framework) revealed a more mixed picture. The Investors in People and Management Standards Framework only included nine and ten of the 19 Management Competencies for Preventing and Reducing Stress respectively. However the DTI Inspirational Leadership framework was a much closer fit to the 'Management Competencies for Preventing and Reducing Stress at Work' framework, including all but five of the competencies ('Health and Safety', 'Knowledge of Job', 'Taking Responsibility', 'Managing Conflict' and 'Seeking Advice').

- Thus, across the majority of frameworks, there appeared to be a large overlap between the general management behaviours that managers are expected to demonstrate, and the stress management behaviours identified in this research. However, there are also significant gaps, with none of the frameworks including all the behaviours relevant for preventing and reducing stress at work.

Exploring possible integration into existing people management practices

- Reactions to an initial draft of the Management Competencies for Preventing and Reducing Stress framework at workshops for Human Resource, Health and Safety and Occupational Health professionals revealed that delegates felt the competencies included in the framework clearly overlapped with existing 'good' management behaviours and therefore would be possible to integrate into their particular people management practices.

- Delegates noted that the approach – talking about stress management in the context of people management – offered an opportunity for Human Resource and Occupational Health/ Health and Safety professionals to meet on common ground, therefore overcoming the barriers of some traditional stress management approaches.

Implications of the Research

The implications of the research findings were explored with reference to implications for future research and for three audiences (Policy Makers, Employers and Line Managers).

Research

It is envisaged that the current study should be the first phase of a broader research programme, which will a) validate the competency framework, both in terms of concurrent and test-retest validity, b) develop a psychometrically valid measure of the relevant behaviours for use in research and practice as a self report or upward feedback measure, and c) design and test training interventions that can be used to develop managers' competence in managing stress in others. Further research is also needed to explore the interactions between competencies, in order to explore meta-traits and synergies that are relevant to effective stress management.

Opportunities also exist for applying a competency approach to other areas of occupational health. For example, the identification of the specific behaviours required by line managers to support effectively the return to work of employees' following a period of sickness absence.

Policy Makers

In terms of policy relating to the HSE Management Standards, both the framework itself and subsequent mapping of the competencies onto the six HSE Management Standard areas provides a vehicle for encouraging employers to implement the Standards and a mechanism to help them do so. By clarifying the manager behaviours that are important for managing stress, the framework allows the development of interventions to facilitate behaviour change, ensuring managers have the appropriate skills, abilities and behaviours to manage employee stress effectively and implement the HSE Management Standards. Such interventions can be used as a mechanism for tackling specific 'hotspots' (such as departments, units and teams), tackling specific psychosocial hazards (e.g. Demands, Control), and more generally to ensure that 'systems are in place locally to respond to individual concerns' as specified by the Standards.

In demonstrating the overlap with general management competencies, opportunities for Government policy to integrate campaigns on good leadership and management with those on Health and Safety are suggested to achieve maximum effect. The mapping of the framework onto other national frameworks highlighted some 'gaps' in these frameworks, particularly around the 'softer skills' such as 'Managing and Expressing Emotion' and 'Managing Conflict'. This suggests that such national frameworks could usefully be reviewed in light of this research, and aim to integrate some of the factors relevant to stress management.

Employers (Health and Safety, Occupational Health and Human Resources professionals)

The competency framework approach puts stress management and the Management Standards into a language and format that is easily accessible to HR professionals and line managers. It also provides a common language to facilitate collaboration between HR, Health and Safety, and Line Managers.

The key message to employers is that they need to integrate stress management behaviours into the processes they use to define and develop management competence and that they can use the competency framework from this research to do so. These processes could include: training and development interventions to ensure managers develop the appropriate skills, abilities and behaviours to manage stress effectively; selection and assessment interventions; and performance management systems to ensure managers are rewarded and held accountable for showing the relevant behaviours. As in the implications for policy makers, the framework can be used to complement other stress management activities, for instance as a mechanism for tackling specific 'hotspots' (such as departments, units and teams) or for tackling specific psychosocial hazards (e.g. Demands, Control) and help ensure that 'systems are in place locally to respond to individual concerns'.

Above all, the framework will enable employers to support managers better. By using the competency framework approach, employers will be supporting managers to be effective stress managers in terms of being able to prevent, identify and tackle stress in their teams – without actually increasing the workload and therefore the stress upon the line manager him-/herself.

Line Managers

A key message to Line Managers is that effective stress management does not have to be a separate activity: stress management is a part of normal general management activities. It is about the way managers behave on a day-to-day basis towards those that they manage. This framework aims to provide managers with a clear understanding of the behaviours they should show, and those that they should avoid, when managing others.

1 INTRODUCTION

1.1 MANAGERS AND THE ISSUE OF WORKPLACE STRESS

Workplace stress is a significant problem for organisations. Recent estimates suggest that over half a million people are affected by work-related stress, costing UK industry an estimated £9.6bn per year (HSE, 2005). In 2004/2005, a total of 12.8 million working days were lost to stress, depression, and anxiety (HSE, 2006). In a recent CIPD survey (CIPD, 2005), 40% of responding organisations reported an increase in stress-related absence. In response to this escalating problem, the UK Health and Safety Executive (HSE) has developed national Management Standards for work-related stress, which it published in November 2004. These standards provide guidance on best practice for employers, with the aim of improving stress management throughout UK workplaces. The aim is that implementation of the standards, by reducing work-related stress, will contribute to the HSE achieving its targets for reducing prevalence and incidence of work-related illness (and absence).

The Management Standards initiative is driven from Health and Safety; however, much of the responsibility for its implementation will fall on human resources (HR) professionals and line managers. This necessitates not only that HR professionals and managers have an informed understanding of what stress is, but also that they understand the skills, abilities and behaviours needed to implement the Management Standards and manage their staff in a way that minimises work-related stress. While the interventions proposed by the guidance accompanying the HSE Management Standards are important, this report aims to supplement them with what the authors see as a missing part of the stress management jigsaw: an understanding of the role of the manager in effective workplace stress management.

Managers both occupy an intermediary level between individual and organisational levels of stress management practice, and play an intermediary role between individual staff members and the organisation. As a result, they can be a significant determinant of how well an organisation manages employee stress. For example:

- Managers can cause (or conversely prevent) stress by their behaviour towards their staff (Tepper, 2000; Hogan, Curphy & Hogan, 1994);
- Managers' behaviour is likely to impact on the presence/absence of psychosocial hazards in their staff's working environment (van Dierendonck et al., 2004; Cherniss, 1995);
- Relationships between psychosocial hazards and well-being are complex and may be affected by how a manager behaves (Neilsen et al., 2006);
- If an individual suffers from stress, their manager will need to be involved in designing and implementing solutions (Thomson, Rick & Neathey, 2004);
- Managers 'hold the key' to work redesign initiatives (and organisation development/change initiatives more generally) (Saksvik, Nytro, Dahl-Jorgensen & Mikkelsen, 2002);
- Managers are responsible for the uptake and roll-out of risk assessments for work stress within their team/ department and the subsequent interventions.

In order to leverage the role of the manager as a mechanism for reducing workplace stress, we need to understand exactly what manager behaviours are significant in this context. The research reported here aims to build this understanding.

1.2 THE IMPACT OF SUPERVISORY BEHAVIOUR ON EMPLOYEE STRAIN: A REVIEW OF THE RESEARCH LITERATURE

There is now a reasonable consensus amongst researchers on the general nature of work-related sources of stress or 'stressors' (Cox et al., 2000). This consensus is based on a voluminous body of research that has demonstrated links between particular aspects of work, and various unfavourable employee and organisational outcomes, such as mental and physical ill-health, job dissatisfaction, and sickness absence (e.g., Bosma et al., 1997; De Lange et al., 2003; Karasek & Theorell, 1990; Parker & Wall, 1998; Terry & Jimmieson, 1999; Vahtera et al., 2000; Van der Doef & Maes, 1999). The findings of this research provide the basis for the HSE Management Standards for stress, which focus on six key aspects of the design and management of work: Demands, Control, Support, Relationships, Role, and Change (Mackay et al., 2004).

The bulk of the research that underpins these six standards has examined fairly 'global' work design constructs and measures, such as work demands, job control, supervisory support, and role ambiguity. While this research has been crucial in identifying those general psychosocial work characteristics (e.g., low job control) that are likely to be hazardous to employees' well-being, it has provided only limited information on the more specific supervisory behaviours that play a role in determining employee well-being outcomes. To address this apparent gap in the occupational stress literature, we present below an overview of the research that has investigated the impact of various supervisory behaviours and styles on employee well-being. In conducting this review, we hope to contribute to the recent convergence of the leadership and occupational health psychology research literatures (e.g., van Dierendonck, Haynes, Borrill, & Stride, 2004; Gilbreath, 2004; Nyberg, Bernin, & Theorell, 2005).

1.2.1 Clarification of terms

We use the term strain (or distress) to refer to the range of negative outcomes that may be experienced by employees when faced with psychosocial stressors (such as excessive job demands or difficult work relationships) (e.g., Jex, 1998; Lazarus & Folkman, 1984; Quick, et al., 1997). Such strains are usually classified as:

- *psychological* (e.g., general psychological distress, anxiety, depression, burnout),
- *physical* (e.g., tension headaches, musculoskeletal disorders, high blood pressure, tremors),
- or *behavioural* (e.g., absenteeism, alcohol misuse, marital conflict).

In the following review of the literature we have mainly focused on the impact of supervisory behaviour on psychological strains. However, we decided not to include research investigating the links between supervisory behaviour and job satisfaction (even though job dissatisfaction is often classified as a psychological strain); this decision was based on the fact that job satisfaction is one of the most frequently researched outcomes in the leadership literature, its correlates have been widely reviewed and a review of such a large body of research was simply beyond the scope of this report.

A notable feature of the research examining the impact of specific management behaviours on employee health is that the terms "leader", "manager", and "supervisor" have been used interchangeably. There has been debate within the literature about the distinction between manager and leader. Furnham (2005) stated the essential difference between leaders and managers is that while managers perform a rational, analytic and intellectual function, leaders inspire by vision, values, confidence and determination. In a similar conceptualisation, Alimo-Metcalfe and Alban-Metcalfe (2002) stated a manager *'is a person who takes on a management role, which comprises activities such as planning, organising, setting objectives, creating and monitoring systems and ensuring standards are met'* and a leader is '*someone who takes on a more proactive role, with activities such as creating a vision for an organisation, helping the organisation to develop by adapting to changing circumstances and encouraging innovative practices'*(in 'Psychology at Work', pp. 301). In this definition therefore, management is seen as a static activity, dealing with day-to-day events and maintaining the status quo, whereas leadership is essentially dynamic – challenging the current practice and dealing creatively with the way in which an organisation can utilise its potential and move forward into the future.

However, many theorists have challenged the 'static' conceptualisation of management (Floyd & Wooldridge, 1992, 1994, 1997, Wooldridge & Floyd, 1990; Shamir, 1995). It is likely, as concluded by Furnham (2005), that leaders and managers are not mutually exclusive although they are distinct and also that it is possible for an individual to be both or neither.

It is worthy of comment that many leadership theories, such as transformational leadership (a model further explained in Section 1.2.4), have been based on research from chief executives' and senior managers' perceptions of their managers, rather than collected directly from direct reports of lower level managers. It is suggested that this 'social distance' (Alimo-Metcalfe & Lawler, 2001) may underlie the different perceptions of leadership presented in the research.

A number of authors have noted that it is likely to be the behaviour of nearby middle managers that will have the greatest influence on employees' well-being, rather than the behaviour of more distal senior managers or organisational leaders (e.g., Alimo-Metcalfe & Alban-Metcalfe, 2001; Nyberg, Bernin, & Theorell, 2005). This view is reflected in the studies reviewed below, which focus exclusively on employees' perceptions of the behaviours exhibited by their immediate line managers. The terms leader, manager, and supervisor are all also used in the following discussion, in accordance with the language used in the studies under review.

1.2.2 Section overview

We have organised our review of the relevant research into five main sections, to reflect the different theoretical models and methodologies that have been employed. Each of these sections provides an overview of the beneficial or harmful impact of particular types of supervisory behaviour on employee strain outcomes (e.g., psychological distress, anxiety, and burnout).

1. The impact of *task*- and *relationship*-focused leader behaviours, which have typically been assessed by the initiating structure (task-focused) and consideration (relationship-focused) scales of the Leader Behaviour Description Questionnaire (LBDQ; Stogdill, 1963).
2. The impact of *transformational* and *transactional* leader behaviours, which have been measured by the Multifactor Leadership Questionnaire (MLQ; Bass & Avolio, 1997) or the Transformational Leadership Questionnaire (TLQ; Alimo-Metcalfe & Alban-Metcalfe, 2001).
3. The impact of *leader-member exchange* (or LMX), which focuses on the quality of the supervisor-direct report dyadic relationship.
4. The impact of a wider range of *supervisory behaviours* that have been associated with employee strain; various scales have been developed and used in this fourth group of studies.

5. The impact of *supervisor-focused training programmes* that have been designed to reduce employee strain.

1.2.3 Task- and relationship- focused behaviour

The distinction between *task*- and *relationship*-focused leader behaviour has been evident in the leadership literature for over half a century (e.g., Nyberg et al., 2005; Sosik & Godshalk, 2000; Yukl, 1994). Task-oriented (or *initiating structure*) behaviour refers to those managerial actions that are primarily focused on achieving the goals of a task, such as: planning and organising; assigning people to tasks; communicating information; monitoring performance; defining and solving work-related problems; and clarifying roles and objectives. In contrast, relationship-focused (or *consideration*) leader behaviour includes: supporting employees; showing respect for employees' ideas; increasing cohesiveness; developing and mentoring; looking out for employees' welfare; managing conflict; and team building (e.g., Arnold, 1995; Levy, 2003; Nyberg et al., 2005; Seltzer & Numerof, 1988; Sosik & Godshalk, 2000).

A number of studies have investigated the relations between these two distinct types of supervisory behaviour and employee well-being (e.g., Duxbury et al., 1984; Seltzer & Numerof, 1988; Sheridan & Vredenburgh, 1978). For instance, Seltzer and Numerof (1988) examined the relations between the consideration (or relationship-focused) and initiating structure (or task-focused) and employee burnout. Those workers who rated their immediate supervisor as high in consideration reported significantly lower levels of burnout. The highest levels of burnout were experienced by those employees whose supervisors exhibited a high frequency of task-focused behaviour, but low levels of consideration.

Similar results were reported by Sheridan and Vredenburgh (1978), who investigated the relationship between head nurses' leadership behaviour and the job tension experienced by their staff members. Once again, higher levels of leader consideration were significantly related to lower levels of staff tension. However, the initiating structure behaviour of the head nurses in this study was not significantly related to their employees' psychological well-being.

Taken together, the findings (e.g., Duxbury et al., 1984; Landweerd & Boumans, 1994) suggest that relationship-focused supervisory behaviours have a positive impact on employee well-being. However, the impact of leaders' initiating structure on employees' health appears to be more complex. To elaborate, the research suggests that high levels of task-focused supervisory behaviour can have a *detrimental* impact on employee well-being, but this negative impact may be reduced if the same supervisors also exhibit a range of more relationship-focused behaviours.

1.2.4 Transformational and transactional leader behaviour

More recently, the concepts of *transformational* and *transactional* leadership have become the most widely endorsed paradigm for research into leader behaviour (e.g., Bass 1999; Bass & Avolio, 1994; Judge & Piccolo, 2004; Lowe, Kroeck, & Sivasubramaniam, 1996). According to this influential model, most leader behaviour falls into three broad categories: transformational, transactional, and laissez faire. Transformational leadership behaviour is viewed as particularly effective, because it involves generating enthusiasm for a 'vision', a high level of individualised consideration, creating opportunities for employees' development, setting high expectations for performance, and acting as a role model to gain the respect, admiration, and trust of employees (e.g., Bass, 1999; Bass & Avolio, 1994; Rubin et al., 2005). Transactional leadership, on the other hand, involves a more straightforward exchange between a leader and direct report, whereby the employee is suitably rewarded for good performance (also commonly referred to as contingent reward behaviour). Thus, leaders who are more transactional than transformational are likely to explain to employee's what is expected of them, and the likely outcomes of meeting those expectations, without necessarily emphasising how they can personally develop and grow within the role and organisation (Levy, 2003). Laissez faire (or non-transactional) leader behaviour is

viewed as the least effective, as it is characterised by an avoidance of action, a lack of feedback and communication, and a general indifference to employee performance (Sosik & Godshalk, 2000). Table 1.0 lists some behavioural indicators of transformational, transactional, and laissez faire leadership styles.

Table 1.0 Behavioural indicators of transformational, transactional, and laissez faire leadership styles (adapted from Sosik & Godshalk, 2000)

Transformational	*Transactional*	*Laissez faire*
Articulates a compelling vision of the future (Inspirational motivation)	Makes it clear what one can expect to receive when goals are achieved (Contingent reward)	Is absent when needed
Talks about his/her most important values and beliefs (Idealized influence)	Discusses in specific terms who is responsible for achieving targets (Contingent reward)	Delays responding to urgent questions
Suggests new ways of looking at how to complete assignments (Intellectual stimulation)		
Treats others as individuals rather than just as a member of a group (Individualized consideration)		

Most of the research on transformational leadership has focused on the effects of this form of leader behaviour on employees' performance, job satisfaction, and organisational commitment (e.g., Judge & Piccolo, 2004; Lowe et al., 1996; Nyberg et al., 2005). However, a handful of studies have examined the effects of transformational, transactional, and laissez faire leader behaviours on strain outcomes. One such study was conducted in the US by Sosik and Godshalk (2000), who investigated the relationships between the leadership behaviours exhibited by mentors, and their protégés' experiences of job-related stress (85% of the mentors in this study were also managers to the protégés). The mentors were asked to self-rate the extent to which they exhibited transformational, transactional (contingent reward), and laissez faire behaviours (measured by the Multifactor Leadership Questionnaire (MLQ)), while the protégés provided self-reports of job-related stress. This study found that mentor transformational behaviour was associated with lower levels of protégé stress; interestingly, no such relationship was found for transactional or laissez faire mentor behaviours. In discussing the implications of these findings, Sosik and Godshalk suggest that organisations could potentially reduce work-related stress by coupling mentoring initiatives with transformational leadership training programmes.

Recently, Alimo-Metcalfe and Alban-Metcalfe (2001) have developed the Transformational Leadership Questionnaire (TLQ) to capture the transformational behaviours of 'nearby' leaders (i.e., immediate line managers) in the UK. In validating this scale (in UK local government organisations), these researchers found that managers who were rated higher on the TLQ were also perceived to be effective in reducing job-related stress. In particular, the sub-scale '[having a] genuine concern for others' (displays sensitivity to the feelings of others, offers personal support, and communicates positive expectations) was the strongest predictor of ratings of effective stress management.

These two studies lend credence to the view that transformational leader behaviours - and particularly those that involve some form of individualised consideration - can have a significant and positive impact on employees' psychological well-being. However, it should be noted that transformational leadership researchers rarely examine employee strain outcomes (aside from job satisfaction), and further research is needed to investigate the precise nature of this relationship.

1.2.5 Leader-member exchange (LMX)

LMX represents a third well-known leadership theory that has clear implications for employee well-being. LMX can be distinguished from most other leadership approaches by its specific focus on the quality of the dyadic relationship between an employee and his or her direct supervisor (Gerstner & Day, 1997; Graen & Uhl-Bien, 1995). At the heart of LMX lies the notion that line managers tend to develop close relationships with only a subgroup of direct reports, and engage in higher quality exchanges with that subgroup of individuals than with other members of the team. These quality exchange relationships may manifest in greater levels of mutual trust, respect, liking, support, and reciprocal influence (e.g., Graen & Uhl-Bien, 1995; Harris & Kacmar, 2005; Liden et al., 1993).

As with the two prominent leadership models discussed previously, we found relatively few LMX studies that included the strain outcomes that are the focus of this review (i.e., psychological distress, burnout etc.); rather, the bulk of the LMX literature has focused on job performance and job satisfaction criteria (see Gerstner & Day, 1997 for a review). However, our search did unearth a few studies that examined the relations between LMX quality and employee strain.

In two separate studies conducted in various organisations in the UK, Epitropaki and Martin (1999; 2005) found significant associations between better quality LMX relationships and higher levels of employee psychological well-being (measured by Warr's (1996) job-related anxiety-comfort and depression-enthusiasm scales). As well as a direct relationship between high-LMX and low strain, Epitropaki and Martin (2005) found that a high discrepancy between an employee's 'ideal' and actual manager resulted in a poor-quality LMX relationship, and this, in turn, resulted in a higher level of work-related strain.

High quality LMX has also been found to 'buffer' the effect of negative work environments on work and health outcomes. In a cross-sectional study of more than 1,200 employees conducted in the US, Harris and Kacmar's (2005) investigated the relations between perceived organisational politics, LMX, and employees' job-related anxiety. This study found that while perceptions of organisational politics were significantly related to higher levels of employee strain; the negative impact of organisational politics on employee strain was mitigated (or 'buffered') by high-quality LMX relationships. This buffering effect of LMX was also observed in a study of 195 US-based hair stylists and their supervisors (van Dyne, Jehn, & Cummings, 2002). Van Dyne et al. (2002) examined the effects of both work strain and home strain on two forms of work performance (sales performance and creativity). Specifically, having a high-quality LMX relationship was found to reduce the detrimental effect of work (and, to a lesser extent, home) strain on the hair stylists' creativity. Creativity was found to be lowest when work strain was high and LMX was low. Hence, this study suggests that enhancing the quality of leader-member relationships may be an effective method for reducing the detrimental impact of employee strain on job performance.

One potential (but apparently underutilised) advantage of LMX theory is that it can inform specific supervisor-focused interventions that seek to improve the quality of leader-member relationships. For example, Scandura and Graen (1984) (see also Graen et al., 1982) implemented a six-week LMX-inspired training programme in a government organisation in the US. The programme was designed to help supervisors in: developing active listening; exchanging mutual expectations with each employee; and exchanging resources. Following the training, the supervisors were required to instigate one-to-ones with each member of their team with the aim of increasing 'reciprocal understanding'. This specific LMX intervention was found to be effective in increasing both productivity and employee satisfaction (see Scandura & Graen, 1984). We were unable to find any studies that evaluated the efficacy of this programme for reducing employee strain. Nonetheless, the research summarised above indicates that this type of LMX supervisor training has the potential significantly to enhance employees' psychological health. (Some additional supervisor-focused interventions are discussed in section 1.2.8, below).

Taken together, the findings from these LMX studies strongly suggest: that high-quality LMX is associated with a lower level of employee strain; and that high-quality LMX may help to 'buffer' (or moderate) the detrimental impact of other work-related stressors on employee well-being and job performance. Further research is needed to evaluate the merits of LMX-based interventions for reducing employee strain.

1.2.6 Other supervisory behaviour indices

While acknowledging the importance of the above research, some occupational stress authors have recently noted the limitations of simply adopting prominent leadership theories and measures (e.g., Gilbreath, 2004; Gilbreath & Benson, 2004; Nyberg et al., 2005; Offermann & Hellmann, 1996). For example, Gilbreath and Benson (2004) point out that the LBDQ consideration and initiating structure scales tap a fairly limited range of supervisory behaviours, which are not explicitly related to the work design characteristics (e.g., job demands, job control and supervisory support) that occupy such a central position in the occupational stress literature. As a result, a number of researchers have developed and/or employed other specific supervisor behaviour scales that perhaps more clearly reflect the wider research into work design and occupational health.

Four specific studies which draw from supervisor behaviour scales are summarised below and the scales employed for each of the studies are provided in Appendix 1.0 for ease of comparison:

- Offermann and Hellmann (1996) examined the relationships between various management behaviours and employee strain from multiple perspectives: the managers, their bosses, and their professional and clerical direct reports (this study involved 300 mid-level managers at a multinational bank based in the US). The researchers employed the Survey of Management Practices questionnaire which contains 11 leader behaviour scales. These 11 behavioural scales loaded onto three higher order factors: communication (which included seven of the 11 scales); leader control (which included three of the scales); and delegation (which loaded onto its own factor). Subsequent analyses revealed that higher levels of delegation and communication, and lower levels of leader control, all predicted lower levels of employee strain. Additionally, four aspects of emotional support behaviour - approachability, team building, interest in employee growth, and building trust - were related to lower levels of strain. Interestingly, the employees in this study associated lower levels of participation, delegation, and team building with increased strain, whilst their managers did not necessarily perceive these associations. This discrepancy between managers' and employees' perceptions raises important implications for management development programmes: they may need to focus on raising managers' awareness of the specific behaviours that impact their direct reports.

- Gilbreath and Benson (2004) developed items for their supervisory behaviour scale via interviews with managers and employees in healthcare and retail organisations in the US. A principal aim of this study was to assess the extent to which supervisor behaviour would predict employees' psychological well-being, after controlling for a range of other important variables, including employee demographics, health behaviours, support from others (i.e., non-managers) at work, stressful life events, and (non-specified) stressful work events. Their scale measured a range of specific supervisory behaviours that were related to job control, communication, consideration, social support, group maintenance, organising, and looking out for employee well-being. In line with their prediction, Gilbreath and Benson found that these behaviours were significantly related to employees' mental health, even after accounting for the effects of the other non-supervisory variables (their supervisor behaviour scale explained an additional 5% of the variance in employees' mental

health). This study illustrates the importance of studying specific management behaviours in addition to the more global work design variables (e.g., job control and workplace support) that have traditionally been assessed in the occupational stress literature.

- In a recent longitudinal study conducted in the UK, van Dierendonck, et al. (2004) administered a multidimensional leader behaviour scale and a measure of mental health to over 500 staff in two National Health Service (NHS) Trusts. The participants in this study completed these questionnaires at four time points over a 14-month period. The leader behaviour measure was comprised of nine behavioural subscales. Interestingly, the results of this study suggest that leadership behaviour and employee mental well-being are linked in a 'feedback loop'. Specifically, the researchers found that more effective leader behaviour was related to better employee mental health at one of the measurement time points, and that higher levels of employee well-being led to more favourable perceptions of leader behaviour at another time point. These results provide additional support for the important role of supervisory behaviour in enhancing employees' well-being; and, they further suggest that the well-being of employees helps to determine the nature of their relationship with their supervisors. In other words, manager behaviour and employee well-being may operate in a two-way process.

- While all of the above studies investigated the *direct* relationship between a wide range of supervisory behaviour and employee strain, we found only one study that focused on *why* supervisory behaviour might lead to (or reduce) employee strain. In a study involving 224 accountants in the US and New Zealand, O'Driscoll and Beehr (1994) found that a reduction in *role ambiguity*, in particular, may have mediated (or served as the mechanism for) the relationship between supervisory behaviour and employee strain. Role ambiguity refers to employees' perceptions of any unpredictable consequences and general lack of information regarding the work roles they are expected to perform. Thus, when supervisors were perceived to initiate structure, communicate effectively, set goals, and so on, their employees experienced less ambiguity, and hence lower levels of psychological strain (O'Driscoll & Beehr, 1994). This study suggests that effective supervisory behaviour may have a favourable influence on employee well-being by reducing a key work role stressor that has received a great deal of attention in the occupational health literature (e.g., Beehr, 1976; House & Rizzo, 1970; Kahn et al., 1964; Tubre & Collins, 2000). However, more research (and particularly longitudinal research) is needed before we can draw definitive conclusions regarding the role stressor (or indeed any other) mechanisms that may link specific supervisory behaviours to employees' psychological well-being.

Impact of supervisory behaviour on employees' physical health

While the research reviewed above has documented the links between supervisory behaviour and employees' *psychological* well-being (e.g., psychological distress and job-related anxiety), there is also evidence that supervisor behaviour can have an impact on important *psychophysiological* outcomes. For example, in a quasi-experimental study, Wager, Fieldman, & Hussey (2003) investigated the associations between employees' perceptions of their supervisors' interactional styles and increases in blood pressure. Wager et al. allocated 13 UK healthcare assistants to an experimental group on the basis that they worked under two differently perceived supervisors in the same workplace on separate working days (that is, one supervisor was perceived as having a significantly more favourable supervisory interactional style than the other). The control group consisted of an additional 15 healthcare assistants who worked under one supervisor or two similarly perceived supervisors. For both groups of employees, blood pressure was recorded every 30 minutes over a 12 hour period for three days.

The experimental group of healthcare assistants showed significantly higher systolic and diastolic blood pressure on the days that they worked under the unfavourably perceived supervisor, compared to the days working under the favourably perceived supervisor. Further analyses revealed that these elevations in blood pressure were most strongly related to a divergence in perceptions of supervisory *interpersonal fairness* (that is, where the healthcare assistants perceived a large difference in interpersonal fairness between their two supervisors). This apparently potent aspect of supervision included the following behaviours:

- giving timely feedback (particularly offering praise for a job well done)
- demonstration of trust and respect
- consistency and non-partiality in the treatment of staff members
- the adoption of a flexible approach according to each employee's individual needs

In sum, the results of this research provide rather startling evidence for the potentially detrimental impact of unfavourable supervisory styles on employee health. This study is also consistent with previous research that has identified links between problematic characteristics of work and an increased risk of cardiovascular disease (e.g., Bosma et al., 1998; Theorell & Karaesk, 1996). Interestingly, this study also indicated that working under a *favourably* perceived supervisor was associated with lower blood pressure readings than those observed in the home environment on non-work days, suggesting that some supervisors may help to promote one's physiological health.

Behaviours underpinning supervisory support

Social support has been (and indeed remains) one of the most frequently researched variables in the occupational stress literature. Most research in this area indicates that support from various sources (e.g., peer and supervisor) is helpful in reducing employee strain; that is, most studies have found a significant association between higher levels of support and lower levels of strain (e.g., Cohen & Wills, 1985; Dorman & Zapf, 1999; Fenalson & Beehr, 1994; Ganster, Fusilier, & Mayes, 1986; LaRocco & Jones, 1978). There has however, been some controversy concerning the extent to which support buffers (or moderates) the impact of other work-related stressors on employee strain (e.g., Cohen & Wills; Fenalson & Beehr, 1994; Kaufmann, & Beehr, 1986; Terry & Jimmieson, 1999).

The concept of social support has commonly been operationalised in terms of: 1) the *source* of support (i.e., supervisor, peer (colleague), and family/friends); and 2) the *type* of support, which is often dichotomised into *instrumental* and *emotional* support. Instrumental support refers to the delivery of more 'tangible' assistance, such as help or advice from a supervisor on completing a particular work task. Emotional support, on the other hand, refers to a more empathic type of behaviour, such as sympathetically listening to an employee's difficulties or problems (Fenalson & Beehr, 1994; Quick et al., 1997).

While most of this research has employed fairly global measures of support (i.e., instrumental vs. emotional, or composite support measures), some authors have highlighted the importance of identifying the more specific activities or behaviours that may constitute supervisory support. Most notably, Terry Beehr and his colleagues have sought to identify the more specific *contents of communications* that are likely to be central to the verbally transmitted support provided by one's supervisor (Beehr et al., 1990; Fenalson & Beehr, 1994; McIntosh, 1991).

To elaborate, two US studies involving nurses (Beehr et al., 1990) and secretaries and administrative assistants (Fenalson & Beehr, 1994)[1] investigated three distinct forms of potentially supportive supervisory communication – positive, negative, and non-job – in relation to employee strain. Fenalson and Beehr (1994) assessed the relations between the frequency of these three types of supervisory communication, the more traditional global measures of supervisory support (i.e., instrumental vs. emotional support), and employee strain (which was a composite of anxiety, job dissatisfaction, boredom, and depression). Positive job-related supervisory communication was found to be the most beneficial in reducing employee strain, followed by non-job related communication. Interestingly, higher levels of negative job-related communication were associated with *increased* employee strain (which implies that continually talking (or 'griping') about problematic aspects of work does not constitute an active component of supervisory support; the contents of supervisory communications were more closely related to emotional support than to instrumental support; and the specific contents of supervisory communications explained more of the variance in employee strain that the traditional global measures of supervisory support

In a related study, Stephens and Long (2000) investigated the content of supervisory support communication as a potential buffer of work-related traumatic stress amongst New Zealand police officers. As with the previous study, a greater frequency of non-job and positive job-related supervisory communication was related to lower psychological and physical strain. Supervisors' communication about disturbing work events was also related to reduced levels of strain. Despite these significant relationships, the positive and non-job contents of supervisor communication did not appear to buffer the impact of past traumatic experiences on the strain outcomes (instead, the effects of trauma were reduced more by how easy it was to talk about trauma at the workplace, and by the contents of communications with peers).

To summarise, this small group of studies provides useful information on the types of supervisory behaviours that underpin workplace social support. In terms of the practical implications, these studies suggest that supervisors can provide support by engaging employees in: 1) communication about the positive aspects of their jobs; and 2) communication about topics unrelated to their jobs (e.g., people's interests outside of work). These two forms of supervisory communication appear to be important components of emotional support, in particular.

Impact of bullying supervisory behaviours

The concept of workplace bullying has, perhaps not surprisingly, received a fair amount of attention in the occupational stress literature (e.g., Hoel et al., 1999; Kivimaki et al., 2003; Quine, 1999; Rayner & Hoel, 1997). This research indicates that while bullying is sometimes perpetrated by peers of the targeted employee, it is more common for the perpetrator to be a supervisor or manager of the target (e.g., Einarsen, 2000; O'Connell & Korabik, 2000; Quine, 1999).

A comprehensive review of the bullying literature was recently conducted on behalf of the HSE by Beswick, Gore, and Palferman (2006). Thus, in order to avoid duplicating the efforts of these researchers, we have provided only a brief summary of key points below; their review can be downloaded from www.hse.gov.uk/research/hsl_pdf/2006/hsl0630.pdf

[1] *Although our discussion specifically focuses on supervisory support, it should be noted that Fenalson and Beehr (1994) also examined the impact of peer and family sources of support.*

Their review demonstrates that numerous studies have found significant associations between experiences of bullying and psychological strain (e.g., depression, anxiety, suicidal thoughts, post-traumatic stress; low self-esteem); physical strain (e.g., chronic fatigue, sleep difficulties, and stomach problems); and sickness absence. It is evident that employees who witness bullying at work are also likely to experience increased strain, even if they have not been directly targeted, and that organisational antecedents of bullying may include a change of supervisor, autocratic management style, role conflict, and low job control.

To help identify the types of behaviour that constitute workplace bullying, Beswick et al (2006) scanned the academic literature, websites, and other official sources (e.g., union documents on bullying). They found that most forms of bullying identified from these various sources could be classified into **personal** and **work-related** behaviours. Some examples of each are illustrated in the Table 1.1 below, with the most prevalent at the top.

Table 1.1 Personal and work-related bullying behaviours (adapted from Beswick et al., 2006, pp. 13-15)

Personal behaviours	***Work-related behaviours***
Ignoring/excluding/silent treatment/isolating	Giving unachievable tasks/impossible deadlines/ unmanageable workloads
Malicious rumours or gossip	Meaningless tasks/ unpleasant jobs/ belittling a person's ability
Belittling remarks/undermining integrity/ lies told about you/ sense of judgement questioned/ opinions marginalised	Withholding information deliberately/ concealing information/ failing to return calls or pass on messages
Public humiliation	Undervaluing contribution/ no credit where due/ taking credit for work that is not their own
Being shouted or yelled at	Constant criticism

Beswick et al. also found that many (but not all) of these bullying behaviours could be mapped onto the HSE Management Standards. For example, 'Giving unachievable tasks' was mapped onto the 'Demands' standard; and 'Ignoring/excluding/silent treatment' was mapped onto 'Relationships'. Hence, the reviewers concluded that many bullying behaviours are similar to the 'poor management practices' that are targeted for change in the HSE recommendations for managing work-related stress.

A review by Rayner and McIvor (2006) highlighted the need to consider positive management behaviours in the 'bullying behaviour' model rather than focus solely on negative behavioural indicators as shown in the table above by Beswick et al (2006). In doing so, it is clear to managers not only which behaviours they should avoid but also which behaviours they should engage in. The positive management behaviours were suggested to include demonstrating awareness of employee behaviour, listening to employee concerns, effective communication, mediatory behaviour and early conflict resolution skills.

1.2.7 Mapping the supervisor behaviour research onto the HSE Management Standards

The mapping exercise undertaken by Beswick et al. (2006) provides a useful method for identifying the specific supervisory behaviours that may underpin each of the HSE's six Management Standards. We therefore also employed this approach, with the aim of mapping the various supervisory behaviours investigated in the studies summarised in section 1.2.3 to 1.2.6 onto the six standards. To do this, we examined the HSE's state to be achieved for each standard (see Appendix 1.1) and allocated the dimensions (or factors) contained in the measure of supervisory behaviour used in each study. This mapping can be found in Appendix 1.2. As can be seen from the mapping, we were able to map most of the supervisory behaviour dimensions in each study onto one or more of the six standards; we included an 'Other' category for those supervisory behaviours that did not seem to fit with any of the standards.

1.2.8 Supervisor-focused interventions

While virtually all of the studies summarised above discuss the intervention implications of their findings, we found only a small amount of research that actually investigated the impact of a supervisor-focused training programmes on employees' well-being. These studies are summarised below:

- Theorell et al. (2001) used a quasi-experimental design to evaluate the effects of a supervisor training programme that was aimed at improving the 'psychosocial competence' of a group of managers at an insurance company in Sweden. The managers in this study received the training during biweekly sessions that were spread over one year (60 hours in total). The training comprised of the following four components: Individual: Information on individual functioning (from a medical and psychological perspective); Group: Information on the social psychology of groups; Social psychological process: Designed to initiate practical applications; and Reorganisation: Psychosocial (work) redesign; how to initiate psychosocial improvements at work.

  In the two week periods between sessions, managers were encouraged to discuss the content of the course with their employees. By the end of this training programme, there was an increase in decision authority (or job control) reported by those employees whose managers had attended the training; in contrast, decision authority decreased in the comparison group of employees (whose managers did not attend the training). The employees whose managers had been trained also experienced a significant reduction in serum cortisol levels (a stress hormone), while no change was observed in the comparison group. Hence, this well-designed study provides strong evidence that supervisor-focused initiatives can significantly improve employees' health and perceptions of control.

- Tsutsumi et al. (2005) examined the effects of a single session (approximately two and a quarter hour) supervisory education programme conducted in a prefectural office in Japan. Using a quasi-experimental design, the researchers compared the levels of employee strain in a department in which more than one-third of the supervisors had attended the training, with a second department in which less than one-third of the supervisors had attended the training. In addition to the core 90-minute education programme (which consisted of lectures, case studies, and group discussion), the supervisors were also provided with a 45 minute lecture on active listening skills.

  The results of this study indicate a beneficial impact of this relatively brief supervisor training programme on employee strain. Specifically, in the three months following the intervention, psychological strain decreased significantly in the department in which more than one-third of the supervisors had attended the programme, while the strain levels remained the same in the comparison department. The researchers therefore concluded that such training programmes will only have a beneficial effect on employee well-being if a sufficient number (e.g., more than one-third) of departmental supervisors attend. Interestingly, feedback from the supervisors in this study indicated that the active listening education component was not particularly effective, suggesting that this type of supervisory skill may be difficult to master in a short (45 minute) training session.

- In a related intervention study, which was conducted in a Japanese computer engineering company, Kawakami et al. (2005) evaluated the effect of a four-week, web-based management training programme on employee strain. The 'section chiefs' of the company were randomly allocated to receive the web-based training or to a control group (which received brief training in relaxation). The programme included seven topics ('Essential knowledge about mental health', 'Roles of supervisors in occupational health', and 'Self-care or awareness of stress and coping with it' among others). The average time the managers took to complete the training was 3 to 5 hours, and they were advised to spend 2 to 4 weeks on the entire programme. The managers could complete the training either on their work or home computers.

  Although this web-based programme had no significant impact on employee's strain, it did appear to have a protective effect on employees' perceptions of supervisory support. Specifically, supervisory support reduced significantly amongst those employees whose managers did not receive the training, but remained the same for those employees whose managers completed the programme. This difference was most pronounced for one particular aspect of support - *the extent to which supervisors were willing to listen to an employee's personal problems*. In interpreting this finding, the researchers note that the three-month follow-up period was an extremely busy time for the company as a whole, and suggest that the training may have encouraged managers to maintain their levels of support even during the busy periods. In contrast, the managers who did not receive the training seemed to reduce the frequency of supportive behaviours (particularly listening to employees problems) as the work demands increased.

- In a final recent intervention study, which was reported in the organisational justice literature, Greenberg (2006) investigated the impact of *interactional justice* training for supervisors on employees' self-reports of insomnia. Interactional justice refers to employees' perceptions of the fairness of the interpersonal treatment they receive from organisational authority figures (such as supervisors). Greenberg specifically studied the impact of interactional justice training in a large group of nurses in the US, some of whom had recently experienced a pay cut of somewhere between 10% and 12%. The nurses provided reports on their insomnia levels before their supervisors received the training, one month after the training, and again six months after the training. The intervention itself was delivered to the nurses' supervisors over two consecutive days, and focused on both interpersonal and informational aspects of interactional justice (e.g., Colquitt, 2001).

  The nurses who had experienced a cut in pay reported significantly higher levels of insomnia than a comparison group of nurses whose pay remained unchanged. However, the impact of the pay cut on nurses' insomnia was reduced considerably in a group of nurses whose supervisors had been trained in interactional justice. Moreover, this beneficial effect of supervisory training on nurses' insomnia was still evident six months after the training had been completed.

In sum, this small group of well-designed intervention studies provides strong evidence that supervisor-focused interventions can have a beneficial effect on both work design characteristics (e.g., job control and workplace support) and employees' well-being. Such interventions also appear to have the potential to reduce the detrimental impact of potent organisational stressors (such as workplace injustice and inequity).

1.2.9 Summary of the research literature

Although there is a great deal of variety in the studies reported above, it is possible to distil the following key points:

- Numerous manager behaviours have been empirically linked to employee well-being
- Manager behaviours that involve individualised consideration and/or interpersonally fair treatment appear to be particularly effective in reducing strain
- Specific measures of manager behaviour explain variance in employee strain above and beyond more global measures of work design
- Researchers are beginning to unpack the specific behaviours that underpin constructs such as manager support
- Interventions that focus on manager behaviour can have a significant impact on employee health and well-being

Despite these findings, this body of research is not without its limitations. Some of these are as follows:

- The diversity and range of manager and leader behaviour measures on the one hand, and health outcome measures on the other, makes it difficult to conduct cross-study comparisons
- Most of the research is cross sectional in nature which precludes any firm conclusions about the direction of causality. While there is growing evidence for a causal relationship between work and health over time, further longitudinal research will add value to our understanding of work stress and its impact on individual and organisational outcomes.
- The research predominantly stems from the United States, the Netherlands and Scandinavian countries, and therefore further understanding of the UK perspective is required to explore any cultural differences in stress and its management.
- Much of the research draws from a-priori models of leadership which may fail to capture the unique set of behaviours specific to the management of well-being, health and stress of employees
- Very little research has sought to address *why* particular types of manager behaviour are linked to employee well-being

In view of these limitations, we propose the following:

- The development and validation of a manager behaviour instrument that a) can be used across a number of studies, and b) has well-defined (and psychometrically sound) subscales that relate to key areas of work design (i.e., demands, control, support etc.)
- A greater number of longitudinal and intervention studies to explore the manager behaviours relevant to employee well-being and also investigate the mechanisms linking supervisor behaviour and employee well-being.

We suggest that the first step in achieving the above is to define the relevant manager behaviours and that the best means of achieving this is to take a competency approach. The rationale for this approach is outlined in the section below.

1.3 INTRODUCING A COMPETENCY APPROACH

It is clear from the above literature review that line managers have a central role to play in achieving successful workplace stress management. Thus, if the HSE Management Standards are to make a difference within employer organisations, it is vital that they are translated into actions and behaviours, so that HR professionals and managers understand what is required. It is also essential that the management of stress becomes an integral part of employers' existing people management processes and approach. One route to achieving both these objectives is to identify the 'competencies' required to implement the Management Standards and manage the stress of employees. Such competencies would provide: a) clarity for HR professionals and managers on the behaviours and actions needed to manage stress effectively; and b) a mechanism for integrating stress management into organisations' existing people management frameworks.

1.3.1 Background to competency frameworks and their application

Competency frameworks refer to a complete collection of skills and behaviours required by an individual to do their job (Boyatzis, 1982). They articulate both the expected outcomes of an individual's efforts, and the manner in which these activities are carried out. The concept of competency frameworks emerged in the 1980's as a response both to organisational changes and to wider changes in society. In 1982, Boyatzis wrote 'The competent manager: a model for effective performance', which had considerable influence on the HR profession. Over the following two decades, competency frameworks became an increasingly accepted part of modern people management practice. The latest available competency benchmarking survey, conducted by IRS (Rankin, 2004), found that 76 of the 100 organisations who contributed to the survey were current users of competencies or were about to use them. It was concluded that competencies 'are now part of the standard toolkit of HR professionals' (Rankin, 2004).

Competency frameworks are frequently used to guide human resources interventions, particularly training and development, selection and assessment, and performance management/appraisal (Rankin, 2004):

- Within **training and development**, competencies can be used as a way of identifying an individual's development needs through personal development plans or development centres. They can also be used to design training programmes, through the creation of training modules that aim to help learners to change their behaviour or develop the skills required for particular competencies.

- Within **selection and assessment**, competency frameworks are often a key part of job descriptions and person specifications (Rankin, 2004). In this context, the frameworks can be used to design exercises and situational interviews for assessment centres and other selection methodologies. In this way, behavioural criteria (how people do things) are assessed in parallel with assessment of task performance (what they do) and personal characteristics (Whiddett & Hollyforde, 2006).

- **Performance management** processes also integrate competency frameworks as a way of defining how people are expected to behave in particular roles. Competencies, and the behaviours that underlie them, can be used to define what constitutes competent performance and thereby allow an individual's performance to be measured against the ideal. Behavioural measures derived from competency frameworks can be built into a 'balanced scorecard' system, a set of measures that looks at performance.

- From a broader perspective, through the above practices, competencies can also be used to drive **organisational change**. By establishing the competencies the organisation wants its managers to show, then selecting, developing and rewarding competence in a particular area, the associated behaviours become the norm. For example, there is currently a drive in some organisations to establish a 'coaching culture' in which manager's use coaching skills to enhance their employees' performance. By defining behavioural competencies relevant to coaching and then selecting, developing and rewarding managers for showing competence in this area, the appropriate organisation-wide shift can be made.

1.3.2 Application of competency frameworks to stress management

The literature in the area of management competencies and performance is diverse and well reported. This includes the study of the individual level factors (e.g. personality) that predict behaviour (e.g. Kurz & Bartram, 2002); competency design (e.g. Strebler, Robinson, & Heron, 1997; Whiddett & Hollyforde, 2003); the competency-performance link (e.g. Latham, Skarlicki, Irvine, & Siegel, 1993); and the practical application of competencies in organisations (e.g. Miller, Rankin & Neathey, 2001). Our aim is not to repeat this here but rather, to demonstrate how taking a competency based approach can be used to integrate stress management with existing people management practices.

The competencies included within existing management frameworks are predominantly performance driven and do not explicitly incorporate the behaviours required by managers to manage the stress of others. That said, it is beginning to be recognised that an effective competency framework has applications across a whole range of human resource management and development activities. This change in attitude offers the opportunity to align the management of stress with existing people management practices. By defining the relevant behaviours (competencies) required to manage stress in employees, we can integrate them into more general people management competency frameworks and establish managing stress in direct reports as an integral part of a manager's role.

Defining the competencies required by managers to manage stress in employees opens the way for organisations to select, develop and reward managers for showing behaviour that reduces workplace stress. In particular, the following three types of intervention would be suggested:

- **Training and development interventions** can be designed using the stress management competency framework. These can be used to ensure managers develop the appropriate skills, abilities and behaviours to manage stress effectively in their direct reports.

- The competency framework can also be used to guide **selection and assessment interventions**. These are a means of ensuring that those chosen to be managers show the relevant behaviours, skills and abilities.

- Competencies provide a mechanism for integrating stress management into **performance management**. The competencies provide clear specification of what is expected of managers. Managers who show the relevant behaviours can be rewarded for doing so. Research suggests that if managers are not assessed on their behaviour, they are less likely

to be motivated to behave in particular ways (Daniels, 1996). Thus, using competencies to align people management and stress management is particularly pertinent in this area.

The benefits and opportunities afforded by using a competency framework for stress management are:

- A competency framework puts stress management and the Management Standards into a language and format that is easily accessible to HR professionals and line managers;

- It allows clear specification of what is expected of managers to manage stress in others;

- It allows the development of interventions to ensure managers have the appropriate skills, abilities and behaviours to implement the Management Standards; and

- It allows the Management Standards to be aligned with other national initiatives; for example general management standards (e.g. Management Standards Centre, Chartered Management Institute, 2004), professional frameworks (e.g. Investing in People and DTI Inspirational Leadership Framework) and sector specific initiatives (e.g. National Probation Service Living Leadership Framework, Sheffield City Council Competent Manager Framework, National Health Service Knowledge Skills Framework, Financial Ombudsmen Framework and Scottish Standard for Headship Framework).

1.4 OBJECTIVES OF THE RESEARCH

The current study sets out to fill the gap in research using a competency approach to define the behaviours required by managers to manage stress in others. Specifically, the objectives are:

a) To identify the specific management behaviours that are associated with the effective management of stress at work. This will include those behaviours that are associated with each of the six Management Standards and those behaviours that are associated with the implementation of the HSE Management Standards e.g. management approaches that underlie all the Management Standards.

b) To build a 'stress management competency framework' and to explore the possible integration of this framework into existing management competency frameworks.

It is envisaged that the current study should be the first phase of a broader research programme, which will a) validate the competency framework, b) develop a psychometrically valid measure of the relevant behaviours for use in research and practice, and c) design and test training interventions that can be used to developed managers' competence in managing stress in others.

1.5 CHAPTER SUMMARY

This chapter summarises the results of a comprehensive literature review exploring the link between manager behaviour and employee well-being. The literature demonstrates that numerous management behaviours have been empirically linked to employee well-being and the reduction of strain, particularly those that involve individualised consideration and/or interpersonally fair treatment. Due to the diversity and range of manager and leader behaviours it is difficult to conduct cross-study comparisons; therefore a definitive list of the management behaviours that are specific to the management of well-being in employees is not available. However, researchers are beginning to unpack the specific behaviours that underpin constructs such as manager support.

In order to address the gap in research, this study focuses on defining the relevant management behaviours through taking a competency approach. The benefits and opportunities afforded by using a competency framework for stress management are that it puts stress management into a language or format that is accessible and 'business-friendly' and allows a clear specification of the expectations upon managers to manage stress in others. It also allows for the development of interventions to ensure managers have the appropriate skills, abilities and behaviours to manage employee stress effectively and to implement the HSE Management Standards.

2 METHOD

2.1 OVERVIEW OF METHODOLOGY

A qualitative approach was used to elicit the manager behaviours associated with management of stress in employees. Participants included employees, line managers and HR practitioners working within the five HSE priority sectors: Education, Healthcare, Central Government, Local Government and Finance. Data gathering included: structured one-to-one interviews incorporating the critical incident technique; focus groups; and written exercises. This multi-method, multi-perspective approach has been successfully employed previously to develop performance-based competency frameworks (Patterson, Ferguson, Lane, Farrell, Martlew & Wells, 2000; Robinson, Sparrow, Clegg & Birdi, 2005). Furthermore, this approach allows for the triangulation and preliminary validation of the findings.

The data was gathered in two stages: employee and manager data was collected between December 2005 and May 2006; and HR professional data was gathered in June 2006. The sample included 216 employees, 166 managers and 54 HR professionals. All three participant groups were split equally across the five sectors, such that each sector was represented by at least 40 employees, 24 managers and 10 HR professionals. In order to collect a sample that was representative of a number of organisations, rather than being over-represented by one organisation, no more than 20 interviews (manager and employee) were held at any one organisation. Each of the employee and manager participants engaged in a structured interview and was asked to complete a written exercise (see section 2.4 for details of the development of the interview and written exercise). The interviews were transcribed and content analysis was used to extract themes. The HR professional participants attended one of two half day workshops sponsored by the Chartered Institute of Personnel and Development (CIPD), incorporating focus group discussions about stress management competencies for managers, plus learning input on the HSE Management Standards and the role of HR and line managers.

This section covers:

- 2.2 Attraction and recruitment of participating organisations
- 2.3 Sample
- 2.4 Development of Materials (Interview, Written Exercise and HR Workshop)
- 2.5 Data Storage and Confidentiality
- 2.6 and 2.7 Analysis of data (Interviews and Written Data)

2.2 ATTRACTION AND RECRUITMENT OF PARTICIPATING ORGANISATIONS

A variety of methods was used to recruit participating organisations. The majority of organisations were sourced through existing contacts of the Researchers and contacts of the HSE and CIPD (particularly within the areas of Local Government, Finance and Healthcare). A small number of participants were sourced through organisations that had expressed to the HSE an interest in participating in stress management research, but were not able to undertake the full Management Standards intervention process at that time. Organisations were also sourced as a result of articles and corresponding 'calls for interest' placed within two relevant publications (People Management and the Journal of Occupational Medicine). Finally, further contacts were made and participation secured via networking at conferences, seminars, training sessions and in meetings and conversations with stakeholders at other participating organisations. For full breakdowns of participating organisations and methods of recruitment, please refer to Appendix 2.0.

Key stakeholders within the participating organisations were contacted and given details about the research through provision of an information sheet, which outlined the scope, requirements and benefits of collaboration with the project. If required, stakeholders were also given a selection of recruitment flyers that could be used to aid recruitment of employees and managers within the organisation. Examples of recruitment materials are included in Appendix 2.1.

In all cases, stakeholders provided names and details of employees within their organisation who were willing to take part in the research. Participants within each organisation were recruited via a number of methods as decided by stakeholders within the organisation. In the majority of cases (for instance Standard Life and Napier University), a randomly generated sample of employees from the total organisation was approached via the organisation's email database. Employees were provided brief details of the research and asked if they would be willing to participate. In some cases (for instance Sheffield County Council and West Yorkshire Probation Board), flyers and recruitment emails were sent to all employees of the organisation or were posted around the organisation asking employees if they would be willing to participate. In a small number of cases, employees were specifically chosen to participate due to their previous contact with the Health and Safety department (e.g. British Geological Survey) or through their perceived 'willingness' to participate in research (e.g. Lloyds TSB). In all cases, employees were informed that participation was voluntary and that confidentiality was assured (see Section 2.5).

At the time of recruitment, organisations were given the choice as to whether they would prefer telephone or face-to-face interviews, or a combination of both. In the latter case, participants were asked on an individual basis which method they would prefer. Section 2.3 details the number of participants interviewed using each of these methods.

2.3 SAMPLE

166 managers and 216 employees participated in this study. A breakdown of participant interviews conducted by sector is provided in Table 2.0 below. Full demographic information was received from 97% (n = 369) of the total interviewees (n = 382). Overall, 42% of interviewees were male and 58% female. 46% of interviewees worked within organisations with more than 1000 employees, 17% in those with between 1000 and 4999 employees, 14% in those with between 50 and 249 employees, 13% in those with between 250 and 999 employees and 10% in those with under 50 employees. Overall, the average team size interviewees worked within was 30 people (ranging from an average of 47 in Healthcare to 21 in Education). The average number of direct reports managers were responsible for was 5 employees (ranging from 4 in Central Government to 7 in Local Government).

On average, interviewees had worked within the organisation for 11.45 years (ranging from 8.67 in Education to 13.02 in Local Government) and in their job for 4.45 years (ranging from 3.33 in Finance to 5.25 in Local Government). The average number of hours worked per week was 40.82 (ranging from 43.4 in Education to 38.9 in Central Government). Demographic breakdowns by sector are included in Appendix 2.

Table 2.0 Breakdown of participant interviews conducted in each sector

Sector	*Employee*	*Manager*	*Total*	*Face to Face (%)*	*Telephone (%)*
Financial	43	39	82	15	85
Healthcare	41	40	81	98	2
Education	40	26	66	70	30
Local Government	44	27	71	97	3
Central Government	48	34	82	59	41
Total (N)	216	166	382	67	33

2.4 DEVELOPMENT OF MATERIALS

2.4.1 Interview proformas

Two interview proformas were developed to elicit information about specific behaviours relevant to stress management, one for employees and one for managers.

For all manager and employee interviews, a critical incident technique was used. This technique was first defined by Flanagan (1954) as:

> *'a set of procedures for collecting direct observations of human behaviour in such a way as to facilitate their potential usefulness in solving practical problems and developing broad psychological principles...By an incident it is meant any specifiable human activity that is sufficiently complete in itself to permit inferences and predictions to be made about the person performing the act. To be critical the incident must occur in a situation where the purpose or intent of the act seems fairly clear to the observer and where its consequences are sufficiently definite to leave little doubt concerning its effects'.* (cited by Chell, 1998, pp. 53)

In this research, the interview incorporated critical incident techniques to capture data concerning managers' behaviours that impacted upon the well-being of their direct reports.

The technique is advantageous in that it facilitates the revelation of issues which are of critical importance to the interviewee and enables issues to be viewed in their context. It is therefore a rich source of information on the conscious reflections of the interviewee, their frame of reference, feelings, attitudes and perspective on matters that are of critical importance to them. One of the main disadvantages of the technique however, is that it relies on the accurate and rich recollection of events by the interviewee. In order partially to combat this disadvantage, all participants were sent an e-mail two days before the interview prompting them to think about specific incidents in which managers' behaviour impacted upon the well-being of their direct reports.

At the start of the interview, participants were asked how they defined work related stress. A brief discussion with the interviewer ensured that the interviewee's definition was aligned with the established HSE definition *'stress is the adverse reaction people have to excessive pressures or other types of demand'*. This ensured that all participants drew from the same frame of reference (Chell, 1998).

Employees were asked to describe a time when they had been managed effectively and a time when they had been managed ineffectively at a time of pressure and demand. Managers were asked to describe a time when their action as a manager was effective and when their action as a manager was less effective at a time when an employee (or employees) were under pressure and demand. Each interview gathered data on two critical incidents. Throughout the discussion, participants were asked to identify what their manager did, or what they did as a manager, and what the result of the action was. The focus was upon behaviours exhibited rather than the thoughts, feelings or motivations of the participant.

Proforma interview schedules were developed for both the manager and the employee interviews and piloted with two employees and two managers respectively. Upon examination of resultant interview transcripts, minor improvements were made to both proformas. A summary of the employee and manager interview content is shown in Table 2.1 and a copy of the final proformas can be found in Appendix 2.3.

Table 2.1 Summary of Employee and Manager Interviews

Employee Interview	*Manager Interview*
Definition of work related stress	Definition of work related stress
Main day to day sources of pressure and demand	Main day to day sources of pressure and demand
Time when managed effectively under pressure and demand	Time when managed someone/team effectively during pressure and demand
Time when managed ineffectively under pressure and demand	Time when managed someone/team ineffectively during pressure and demand
Time when felt manager action/inaction was the cause of stress in self/team	Time when felt their action/inaction was the cause of stress in team
Examples of manager actions that ensure happy and healthy team	Examples of manager actions that ensure happy and healthy team
	Tools that have helped improvement of stress management skills

2.4.2 Written exercise

In the e-mail sent to participants two days before the interview, participants were asked to complete a demographics form. This included control variables of gender and ethnic background and captured job specific information, including: organisation size, team size, number of direct reports (for managers), job role, length of service and actual hours worked. Information was also gathered about the extent of the participant's awareness of stress management/workplace well-being initiatives within the organisation, awareness of HSE Management Standards and (if there was awareness), experience of implementing the HSE Management Standards Approach. The demographics sheet is included in Appendix 2.4.

At the end of the interview, each participant was asked to complete a written exercise. This asked the participant to identify the positive and negative behaviours representative of each of the six HSE Management Standards. The written exercise was piloted with 3 employees and 3 managers to confirm the clarity of the instructions and ease of use.

Although the content of the written exercise for both managers and employees was the same, the instructions given differed slightly. Employees were asked to '*List one specific example of both a helpful and an unhelpful management action under each of the six characteristics of work. Try to think about specific actions your manager has taken that have affected your work*'. Managers were asked to '*List one specific example of both a helpful and an unhelpful management action under each of the six characteristics of work. Try to think about specific actions you might take as a manager*'. The Employee Written Exercise and the Manager Written Exercise are included in Appendix 2.5.

2.4.3 HR workshop

The HR perspective on stress management behaviours was gained through a focus group exercise included in two separate workshops for HR professionals. At each workshop, delegates were seated according to the sector in which they worked (Healthcare, Education, Finance, Local Government and Central Government). For the data-gathering exercise, each delegate was asked to write on post-it notes manager behaviours that they felt prevented, caused or alleviated stress. They were asked to write one behaviour per post-it note. For the second part of the exercise, delegates were asked to discuss the behaviours they had written down with others at their table (i.e. delegates from the same sector) and allocate behaviours into each of the six Management Standards. Once this was done they were asked to remove any duplication and add each of their behavioural clusters to one of the six posters around the room (one poster representing each of the Management Standard areas: Demands, Control, Support, Relationships, Role and Change). A seventh poster was labelled 'Other' for those behaviours felt to lie outside of the Management Standard areas. Each sector used different coloured post-it notes so that it was possible to see agreement/disagreement in sector perspectives. Behaviours were then transcribed.

2.5 DATA STORAGE AND CONFIDENTIALITY

The e-mail sent to all participants two days before their interviews included details of confidentiality. This made clear that, although participants in some organisations had been 'volunteered' by being picked at random from employee lists, their participation the research project was voluntary and no-one within the company would know whether they did or did not participate. The e-mail emphasised that responses to the demographic sheet, written exercise and interview were confidential and that no-one within the organisation or outside the research team would see any individual responses to the questionnaires. It also emphasised that any reports to the organisation would present summary data only. This procedure was consistent with the United Kingdom's Data Protection Act and all e-mails were approved by stakeholders within the organisation prior to distribution.

For the Healthcare sector, ethical approval needed to be gained prior to commencement of interviews with each organisation Each participant in the Healthcare sector was required to sign a consent form, agreeing to participate in the research, before each interview (consistent with the requirements of Corec).

It was agreed that all interview data would be stored until transcribed, after which time original tapes would be destroyed. All written data (including transcriptions) were anonymised, coded and stored securely at Goldsmiths College, University of London. Only the research team has access to this data.

2.6 ANALYSIS OF INTERVIEW DATA

Interviews using the critical incident technique (as described in section 2.4.1) were undertaken with 166 managers and 216 employees to establish what management behaviours are relevant to the effective and ineffective management of employee wellbeing and stress. A summary of the number of interviews conducted in each sector is shown in table 2.2. The majority (67%) of interviews were carried out face-to-face. In the Healthcare and Local Government Sector only 2% and 3% of interviews respectively were carried out by telephone. In the Financial Sector however the picture was reversed, with 85% of interviews carried out by telephone rather than face-to-face.

Table 2.2 Actual number of interviews by sector suitable for analysis

Sector	*Employee*	*Manager*	*Total*
Financial	45	35	80
Healthcare	40	39	79
Education	34	30	64
Local Government	43	23	66
Central Government	47	33	80
Total (N)	209	160	369

Each interview was recorded and transcribed. During this process, 4 interviews in the Education sector previously coded as 'employee' were reallocated to 'manager' as a result of the content of the interview, i.e. that the interviewee actually responded to the interview as a manager rather than an employee. In addition, 13 interviews (or 3% of the total number of interviews conducted) were rejected due to poor sound quality or technical issues. Therefore the total number of interviews suitable for analysis was 369 in total, including 209 employees and 160 managers.

The transcripts were then downloaded onto NVivo data management system for ease of storage and analysis. NVivo is a code and retrieve system which allows for multi-level coding of unstructured data. Using this method, combined with the large sample size for this research, allows frequency-based to identify the frequencies of behaviours within each competency.

2.6.1 Development of Emergent Framework: Behavioural Extraction and Content Analysis

Once the transcription was completed, the following steps were taken by the researchers:

- Behavioural indicators were extracted from each interview transcript using content analysis. Content analysis (Miles & Huberman, 1984) was used in order to quantify the interviewees' statements or behavioural indicators and generate frequencies, a process widely used in qualitative research (e.g. Dasborough, 2006; Narayan, Menon & Spector, 1999).

- In order to evaluate the extent of agreement between raters, two employee interviews and one manager interview were chosen randomly. Two researchers independently highlighted behaviours from the transcripts on the basis of the definition *'all managerial behaviours associated with the management of stress'*. There was an 85% level of agreement on the three transcripts, i.e. both researchers highlighted the same areas of text within the transcript.

- Behaviours were independently extracted by the two researchers from 20 randomly chosen transcripts (10 manager and 10 employee interviews spread across the five sectors). An average of 15.5 behaviours were extracted per interview (ranging from 4 to 33 behaviours from each interview). The behaviours from all 20 transcripts were then written onto 336 separate cards in preparation for the initial card sort.

- Two impartial observers who were blind to the aims of the study (Dasborough, 2006) were asked to sort the 336 cards into behavioural themes or 'competencies'. A copy of the full instructions given to the card sorters is included in Appendix 2.6. From this card sort, six broad behavioural themes were identified: support, demands/resources, feedback, awareness (of person and job), unprofessional behaviours and personal style.

- Two researchers discussed the themes emerging from the initial card sort and for clarity, reanalysed each of the six broad themes into sub themes. New themes were also created for those behaviours that did not fit into one of the existing themes. Following this second card sort, a total of 22 themes were identified. This process is in accordance with other published research (e.g. Patterson et al, 2000) in which project researchers (rather than objective observers) conducted the initial card sort.

- The 22 themes were transferred onto NVivo to create the initial coding structure. NVivo was employed to conduct the content analysis on the remaining transcripts.

- At an early stage of using the coding framework, two researchers independently coded 10 randomly chosen transcripts on NVivo, in order to evaluate the extent of coding agreement. Inter-rater agreement was approximately 50%. According to Currell, Hammer, Baggett & Doniger (1999), agreement at this level is not acceptable. To improve inter-rater reliability, the researchers held a discussion to clarify areas of disagreement. Following this, three additional transcripts were independently coded by both researchers and this time agreement was at the 76% level. As this is, according to Currell et al (1999), both an acceptable level and indicates convergence across the raters, coding progressed for the remaining transcripts.

- Given the importance of precision of the coding categories, particularly the need for codes to be mutually exclusive (i.e. they only allow for behavioural indicators to fall into one code (Kerlinger, 1964)), at two points in the process researchers met to consider the rigour of the coding structure. Following coding of 150 transcripts, one competency, labelled 'Awareness of Performance', was merged with another competency, labelled 'Managing Workload and Resources'. After coding all the transcripts, the competency labelled 'Hands-on' was merged with the competency 'Taking Responsibility' and the competency 'Listening' with 'Participative Approach'. This ensured the coding system was precise and each theme mutually exclusive.

In total, 4763 behavioural indicators were identified and coded from the 369 transcripts, giving an average of 12.9 per transcript (range 4 and 47).

Following completion of content analysis, the emergent framework was developed which included 19 competencies. At this point, the researchers took each competency separately and allocated behavioural indicators to give 'effective' and 'ineffective' examples, allowing for comparisons of positive and negative examples of behaviours relating to each competency.

2.6.2 Frequency Analysis

A frequency analysis, as used in a number of other related studies (e.g. Dasborough, 2006), was conducted on the data, allowing examination of the frequency with which behaviours relating to each competency are mentioned. Two types of frequency were explored:

- *Percentage of those who mentioned the competency*, or the number of interviewees who mentioned each competency at least once (a dichotomised variable of 'presence' or 'absence');
- *Percentage frequency of mentions*, calculated by dividing the number of mentions of each competency by the total number of mentions of all the competencies.

The percentage frequency score allows us to capture all mentions of each competency, including where a single competency is mentioned more than once within a single interview (for instance an interviewee might give an example of a positive indicator of manager empathy in response to the question relating to effective stress management behaviour and a negative indicator of manager empathy in response to the question relating to ineffective stress management behaviour). At present, and without validation, we are unable to establish which is the 'right' method of frequency analysis to use, or whether either is a valid indication of which competencies are most important: therefore, both frequency measures are provided, where applicable, for the comparative analyses.

2.6.3 Statistical analysis

Chi Square analysis was used to identify significant differences between the number of interviewees in each group mentioning competencies. The 19 competency variables used for this comparison were based on the dichotomous 'percentage of those who mentioned' data, denoting presence or absence of mention for each interviewee. Separate chi-square (2 x 2) tests were run on each competency in order to identify significant differences between manager and employee, and between sectors by competency. Although is it accepted that it is dangerous to make an assumption that differences in frequency of coding correspond to meaningful differences within or between transcripts (King, 1998), it is also felt that comparisons of frequencies can be helpful in suggesting areas that might repay closer consideration.

2.6.4 Mapping the emergent framework to the HSE Management Standards, competency frameworks and sector specific frameworks

The emergent 'Management Competencies for Preventing and Reducing Stress at Work' framework was compared to the HSE Management Standards to identify commonalities and discrete components related to the effective management of stress at work. Two researchers completed this task together in order to reach agreement. For results of this comparison, see section 3.2. From this mapping, competencies were merged together to create new Management Standard variables. In order to identify significance differences between mention of Management Standard areas between managers and employees and by sector, Mann-Whitney and Kruskal Wallis tests were used. For results of this testing, see sections 3.3.2 and 3.4.2.

Mapping was conducted to compare the 'Management Competencies for Preventing and Reducing Stress at Work' framework with existing management or leadership frameworks. Here, the emergent framework was compared to the Transformational Leadership Questionnaire (TLQ, Alimo-Metcalfe & Alban-Metcalfe, 2001), the Multi-Factor Leadership Questionnaire (MLQ, Bass & Avolio, 1994), the Great 8 Competency Framework (Kurz & Bartram, 2002) and the Leadership Behaviour Description Questionnaire (LBDQ, Stogdill, 1963). In order to do this, three researchers separately completed a mapping exercise. Inter-rater agreement was then calculated and a final mapping for each framework agreed. A copy of the mapping exercise is included in Appendix 2.7. For results, see section 3.10.1.

A similar mapping exercise was conducted to compare the 'Management Competencies for Preventing and Reducing Stress at Work' framework with sector specific frameworks. One framework was included for each sector. For Central Government, the National Probation Service Living Leadership Key Practices Framework was used. For Healthcare, the Knowledge and Skills Framework was used, using just the core competencies area of this framework. For Education the Scottish Standard for Headship Framework was used. For Local Government, The Sheffield Manager competency framework (Sheffield City Council) was used and for Finance the Financial Ombudsmen framework was used. A copy of the mapping exercise is included in Appendix 2.8. For results, see section 3.10.2.

A final mapping exercise was conducted to compare the 'Management Competencies for Preventing and Reducing Stress at Work' framework to three national frameworks. These included the Management Standards Framework (as used by the Chartered Management Institute), the Investors in People framework and the DTI Inspirational Leadership framework. A copy of the mapping exercise is included in Appendix 2.9. For results, see section 3.10.3.

2.7 ANALYSIS OF WRITTEN DATA

Completed written exercises from managers and employees were received from 62% (n = 236) of the total interviewees (n = 382). Data gained from the written exercises was entered into an Excel spreadsheet. Content analysis was then used to fit the existing coding framework (see Section 3.1) of 19 competencies onto the data gained from the written exercise and enable frequency based analysis. Results of this coding are explained in section 3.5.

The competencies displayed within each of the six Management Standard areas were then compared to how researchers had mapped the competencies to the HSE Management Standards, to identify commonalities or discrepancies in areas of inclusion. For results of this comparison, see section 3.5.

Post-its used in the two HR workshops were gathered and transcribed. Data was then added into an Excel spreadsheet. Content analysis was then used to fit the data gained from the HR exercise into the existing coding framework (see section 3.1) and enable frequency based analysis. Results of this coding are explained in section 3.6. The competencies displayed within each of the six Management Standard areas were then compared to how researchers had mapped the competencies. For results of this comparison, see section 3.6.

2.8 CHAPTER SUMMARY

A qualitative approach was used to elicit the behaviours associated with management of stress in employees. Participants included 216 employees, 166 line managers and 54 HR practitioners working within the five HSE priority sectors: Education, Healthcare, Central Government, Local Government and Finance. Data gathering included: structured one-to-one interviews incorporating the critical incident technique; workshops; and written exercises.

The interviews suitable for analysis (209 employees and 160 managers) were transcribed and content analysis was used to extract themes and develop a coding framework. Following completion of content analysis, the emergent framework was developed. Frequency analysis was used to explore the proportion of participants who had mentioned particular competencies in the interviews and the percentage frequency of mentions. Separate analyses were conducted to identify manager and employee differences and sector differences.

Behavioural indicators generated from the written exercises completed by interviewees and the workshop exercises completed HR professionals were extracted and content analysis was used to fit the data into the existing framework.

The emergent 'Management Competencies for Preventing and Reducing Stress at Work framework was compared to the HSE Management Standards to identify commonalities and discrete components related to the effective management of stress at work. Three further mapping exercises were also conducted to compare the emergent framework with: a) existing management frameworks; b) sector specific frameworks; and c) national frameworks.

3 RESULTS

3.1 EMERGENT 'MANAGEMENT COMPETENCIES FOR PREVENTING AND REDUCING STRESS AT WORK' FRAMEWORK

4,764 behavioural indicators were extracted from 369 transcripts, equating to an average of 12.91 behaviours per transcript. These behaviours were themed using content analysis as described in section 2.6 into 19 competencies. Table 3.0 shows the resultant framework.

Table 3.0 Management Competency framework with brief descriptions of competencies

Management competency	*Description of competency*
Managing workload and resources	Arranging for extra staff when needed, monitoring and awareness of team's workload, having realistic expectations on delivery
Dealing with work problems	Effective problem solving, e.g. developing action plans, being decisive
Process Planning and Organisation	Planning and reviewing both present and future workloads
Empowerment	Trusting employees to do their job
Participative approach	Listens to and consults with team, manages on a team basis
Development	Helps employee develop within the role
Accessible/Visible	Keeps an open door policy, in regular contact with team
Health and Safety	Takes Health and Safety of team seriously
Feedback	Showing gratitude, providing praise and rewarding good work
Individual Consideration	Provides regular one-to-ones with employees, flexible with regard to work-life balance issues
Managing Conflict	Deals with workplace bullying, seeks to resolve conflicts fairly
Expressing and Managing Emotions	Remains calm under pressure in front of team, rarely loses temper
Acting with Integrity	Keeping promises, e.g. keeping personal issues with employees confidential
Friendly Style	Relaxed, easy-going approach, e.g. socialising, using humour and buying treats for team
Communication	Keeps staff informed of what is happening in the organisation, communicates clear goals and objectives
Knowledge of Job	Shows understanding of the tasks that the team performs
Taking Responsibility	Leading from the front, taking a hands on approach
Empathy	Sees each employee as a person, e.g. awareness of employees personal lives, stress levels and of differing needs within the team
Seeking Advice	Seeks advice when required e.g. occupational health, HR and other managers

Table 3.1 provides examples of both positive and negative behavioural indicators relating to each competency.

Table 3.1 Management Competency framework with positive and negative behavioural indicators

Competency	*Positive examples of Manager Behaviour*	*Negative examples of Manager Behaviour*
Managing workload and resources	• Bringing in additional resource to handle workload • Aware of team members ability when allocating tasks • Monitoring team workload • Refusing to take on additional work when team is under pressure	• Delegating work unequally across the team • Creating unrealistic deadlines • Showing lack of awareness of how much pressure team are under • Asking for tasks without checking workload first
Dealing with work problems	• Following through problems on behalf of employees • Developing action plans • Breaking problems down into manageable parts • Dealing rationally with problems	• Listening but not resolving problems • Being indecisive about a decisions • Not taking issues and problems seriously • Assuming problems with sort themselves out
Process Planning and Organisation	• Reviewing processes to see if work can be improved • Asking themselves 'could this be done better?' • Prioritising future workloads • Working proactively rather than reactively	• Not using consistent processes • Sticking too rigidly to rules and procedures • Panicking about deadlines rather than planning
Empowerment	• Trusting employees to do their work • Giving employees responsibility • Steering employees in a direction rather than imposing direction	• Managing 'under a microscope' • Extending so much authority employees feel a lack of direction • Imposing a culture of 'my way is the only way'
Participative approach	• Provides opportunity to air views • Provides regular team meetings • Prepared to listen to what employees have to say • Knows when to consult employees and when to make a decision	• Not listening when employee asks for help • Presenting a final solution rather than options • Making decisions without consultation
Development	• Encourages staff to go on training courses • Provides mentoring and coaching • Regularly reviews development • Helps employees to develop within the role	• Refuses requests for training • Not providing upward mobility in the job • Not allowing employees to use their new training
Accessible/ Visible	• Communicating that employees can talk to them at any time • Having an open door policy • Making time to talk to employees at their desks	• Being constantly at meetings/away from desk • Saying 'don't bother me now' • Not attending lunches or social events with employees
Health and Safety	• Making sure everyone is safe • Structuring risk assessments • Ensuring all Health and Safety requirements are met	• Not taking Health and Safety seriously • Questioning the capability of an employee who has raised a safety issue
Feedback	• Praising good work • Acknowledging employees efforts • Operating a no blame culture • Passing positive feedback about the team to senior management	• Not giving credit for hitting deadlines • Seeing feedback as only 'one way' • Giving feedback employees are wrong just because their way of working is different

Table 3.1 Management Competency framework with positive and negative behavioural indicators (continued)

Competency	*Positive examples of Manager Behaviour*	*Negative examples of Manager Behaviour*
Managing Conflict	• Listening objectively to both sides of the conflict • Supporting and investigating incidents of abuse • Dealing with conflict head on • Following up on conflicts after resolution	•□ Not addressing bullying •□ Trying to keep the peace rather than sort out problems •□ Taking sides •□ Not taking employee complaints seriously
Expressing and managing own emotions	• Having a positive approach • Acting calmly when under pressure • Walking away when feeling unable to control emotion • Apologising for poor behaviour	• Passing on stress to employees • Acting aggressively • Loosing temper with employees • Being unpredictable in mood
Acting with Integrity	• Keeps employee issues private and confidential • Admits mistakes • Treats all employees with same importance	• Speaks about employees behind their backs •□ Makes promises, then doesn't deliver • Makes personal issues public
Friendly Style	• Willing to have a laugh and a joke •□ Socialises with team •□ Brings in food and drinks for team • Regularly has informal chats with employees	•□ Criticises people in front of colleagues •□ Pulls team up for talking/laughing during working hours •□ Uses harsh tone of voice when asking for things
Communication	• Keeps team informed what is happening in the organisation • Communicates clear goals and objectives • Explains exactly what is required	• Keeps people in the dark •□ Holds meetings 'behind closed doors' • Doesn't provide timely communication on organisational change
Taking Responsibility	• 'Leading from the front' • Steps in to help out when needed •□ Communicating 'the buck stops with me' • Deals with difficult customers on behalf of employees	• Saying 'its not my problem' • Blaming the team if things go wrong • Walking away from problems
Knowledge of Job	• Able to put themselves in employees' shoes • Has enough expertise to give good advice • Knows what employees are doing	• Doesn't have the necessary knowledge to do the job •□ Doesn't take time to learn about the employee's job
Empathy	•□ Takes an interest in employee's personal lives •□ Aware of different personalities and styles of working within the team •□ Notices when a team member is behaving out of character	•□ Insensitive to people's personal issues •□ Refuses to believe someone is becoming stressed •□ Maintains a distance from employees 'us and them'
Seeking Advice	• Seeks help from occupational health when necessary •□ Seeks advice from other managers with more experience • Uses HR when dealing with a problem	•□ n/a

Frequency analysis was conducted on the data, allowing examination of the frequency with which behaviours relating to each competency are mentioned. As noted in Section 2.6, two types of frequency were explored:

- *Percentage of those who referred to the competency*, or the number of interviewees who referred to each competency at least once (a dichotomised variable of 'presence' or 'absence');
- *Percentage frequency of mentions*, calculated by dividing the number of mentions of each competency by the total number of mentions of all the competencies. The percentage frequency score allows us to capture all mentions of each competency, including where a single competency is mentioned more than once within a single interview (for instance an interviewee might give an example of a positive indicator of manager empathy in response to the question relating to effective stress management behaviour and a negative indicator of manager empathy in response to the question relating to ineffective stress management behaviour).

Over half of all interviewees referred to one or more examples of effective and/or ineffective manager stress management behaviours that fall into the following five competencies: 'Managing Workload and resources' (77%), 'Participative approach' (68%), 'Communication' (63%), 'Individual Consideration' (61%) and 'Empathy' (51%). The same five competencies also had the highest percentage frequency of mentions.

For most of the competencies, analysis of whether the behaviours mentioned were positive or negative shows that there were more positive behaviours mentioned than negative ones. The only exceptions to this are 'Acting with Integrity', 'Expressing and managing own emotions' (both 64% negative, 36% positive) and 'Managing conflict' (57% negative, 43% positive).

Table 3.2 Management Competency framework showing the percentage of sample that referred to each competency, and percentage frequency of mentions for each competency

Competency	***% of sample who referred to competency***	***% frequency of mentions***	***% of positive indicators***	***% of negative indicators***
Managing workload and resources	77	14	*65*	*35*
Participative approach	68	12	*84*	*16*
Communication	63	10	*65*	*35*
Individual Consideration	61	9	*87*	*13*
Empathy	51	8	*80*	*20*
Accessible/Visible	49	6	*72*	*28*
Dealing with work problems	41	6	*60*	*40*
Process Planning and Organisation	47	6	*61*	*39*
Empowerment	31	4	*66*	*34*
Feedback	32	4	*77*	*23*
Acting with Integrity	28	4	*36*	*64*
Friendly Style	33	4	*90*	*10*
Taking Responsibility	37	4	*64*	*36*
Expressing and managing own emotions	25	3	*36*	*64*
Development	27	3	*91*	*9*
Knowledge of Job	21	2	*56*	*44*
Health and Safety	6	1	*65*	*35*
Managing Conflict	12	1	*43*	*57*
Seeking Advice	9	1	*100*	*0*

The five most frequently referred to competencies were 'Managing Workload and Resources', 'Participative approach', 'Communication', Individual Consideration' and 'Empathy'. Further qualitative information is provided below relating to these competencies. This aims to demonstrate the types of behaviours reported by managers and employees:

1) Managing workload and resources

"They <managers> *are very aware of the deliverables within the area and they are also aware of how many people and the expertise of the people delivering those deliverables. So they will, when they're talking to their managers, say that we have a stress point, a risk area".* Financial employee

'Managing workload and resources' was mentioned as an indicator of manager stress management behaviour more often than any other competency (14% of total number of mentions). The majority of mentions were examples of effective management behaviour (65%). Effective examples related to managers monitoring their team's workload (both when workload was high and when it was low) and taking action such as procuring additional work, staff or resources, setting realistic deadlines and refusing additional workload.

The following excerpts demonstrate positive examples of this competency:

"*I wouldn't set a deadline based on my ability, I would set a realistic deadline based on their ability".* Local Government manager.

"There wasn't a lot of work for us to do at the time so I identified that there was a lot of historical data which could be usefully picked up and cleaned up and then put into our main. And I went up to the senior management and said I would like to address this". Central Government manager.

Within this competency, of the 35% of mentions that were examples of ineffective management behaviour, the majority were about managers having a lack of awareness of how much pressure or work the team had. Causes of this were varied, from managers being assigned to teams without knowledge of the type of work conducted in that area, to managers being too busy themselves, or maintaining a 'them and us' attitude and therefore not actually being in contact with the team. A common theme within this category was that line managers were being pushed by senior managers and therefore the deadlines or the pressure that they were putting on their staff was 'second hand'. Two clear examples of this are:

"A demand will come down from the top and it will take a certain time to get to the person who needs to do it. By the time it gets to them the deadline is increasingly shorter and the people at the top start shouting and everyone at the bottom gets stressed and everyone down the line gets stressed" Financial employee.

"The fact that you couldn't do it and you'd try and explain to her why whatever she was asking couldn't be done, then she'd just scream at you 'I've told the chief executive that it will be done AND YOU MUST DO IT!'". Healthcare employee.

2) Participative approach

"He gives you opportunity to discuss, and he values your input and your knowledge and expertise in that area." Local Government employee.

12% of the behaviours mentioned by both managers and employees clustered within a theme termed 'Participative approach'. Overwhelmingly (84%), examples within this category were of effective management and referred to managers who listened to employees and allowed them a chance to air their views – often within a team meeting format. The following quotation illustrates a manager's view of how this approach works:

"*There was quite a little bit of debate in terms of this has worked well, this hasn't worked well and so on and so forth. So I think at least people feel self engaged that not only were they I suppose part of the problem but they were also part of the solution. What I mean is that it wasn't me as a manager telling them what to do, it was more me as part of a team and them as part of a team with me*". Financial manager.

Of the 16% of mentions within this category that were examples of negative behavioural indicators, comments surrounded managers who, as opposed to taking a participative approach, did not listen to employees' views and made decisions on behalf of the team without any consultation. The following example explains how this can happen in a context of organisational change:

"We had a major reshuffle nearly 2 years ago where all the rounds were changed. And no one from the supervision or the shop floor basically got involved with that. It was all done through one person at a management level and by the time we got to see it, they'd already agreed that that would go ahead." Local Government employee.

3) Communication

"So although there's a lot of change going on and we feel that that could be a stress, we feel that we are given that information as soon as they have it and that there's not a lot of decisions being made in secret, actually at management level or our manager's level." Central Government employee.

10% of the total behaviours mentioned were clustered within the theme of communication. Once again, most mentions (65%) were positive examples of management behaviour, describing managers who kept their staff informed of changes within the team and the organisation and who communicated clear goals. These may have been through formal communication briefings and emails, or via five minute daily meetings about the events of the previous day and the expectations for the day ahead. A theme within this competency was also for managers to be able to communicate negative news to employees in a fair and balanced way. Examples of this were that managers would tell individuals face-to-face rather than by email, would give an honest picture of the consequences of their news, use small group sessions to encourage discussion, and follow up with employees after the communication. An example of a manager encouraging employees to be prepared for bad news is as follows:

"We are going through this with a restructure at the moment. There is a lot of conversation going around about 'what will we be doing here?' and 'what will we be supporting?' We haven't got any answers at the moment. Every conversation I am asked. I speak to the guys on average once a week, some more, and ultimately every time I speak to them I say, have you seen the latest release? How are you feeling at the moment? I try to get them to take a step back and say, this is not necessarily going to happen but how would you feel if it did? Encouraging them to think about what may come without being scaremongering". Financial Sector manager.

Negative examples surrounded managers not communicating adequately with their team and having meetings behind closed doors. Often this was due to managers feeling that there should be no communication until a decision is made, or where there have actually been guidelines from senior management not to communicate, as shown by this example about the closing of a department:

"The senior management committee decided that they would try and fight it quietly for some months before it came to public announcement, rather than keeping people informed of all the steps and nuances of what was going on. And so it came as a bigger bolt from the blue than it could have been done if it had been managed on the assumption that we were going to lose it rather than fighting hard to retain it." Central Government employee

4) Individual Consideration

"If you support them, then they will support you in return." Local Government manager.

9% of the total behaviours mentioned were clustered within a theme labelled 'Individual consideration'. The vast majority of mentions (87%) were positive examples of management behaviour, describing managers who organised one-to-one meetings with employees, who regularly asked 'How are you?' and who were flexible in their approach to personal issues. A wide range of issues was mentioned, from those at work such as allowing flexible working hours, ensuring employees took lunch breaks and left work on time, to personal issues such as arranging leave, supporting employees whilst absent through illness and organising return-to-work programmes.

Negative examples in this category related to managers who didn't operate a flexible approach and showed lack of consideration of issues such as illness at work, return to work, stress or general upset in the team. One Financial employee summed up this by saying *"It was about work being the centre of the universe"*. A clear, although extreme, example follows:

"Our manager was quite down on us taking breaks but she started off being quite down on us taking like a tea break or a smoke break or whatever, you know, but then she sort of cracked down on us taking lunch breaks. She ended up saying 'lunch is for losers!'". Local Government employee

5) Empathy

"You don't have to know everything about everybody, but it doesn't half make a difference if you can refer to something that you know as being relevant or important to them personally and they might otherwise think you don't know anything about it. Personal touches, congratulations, notes on bereavements, flowers, pictures on the walls, plants, silly little symbolic things which people nevertheless see as you thinking about them and just them". Central Government manager.

8% of the behaviours mentioned related to managers' empathy or understanding of individual differences. Once again the majority of mentions (80%) were positive examples of management behaviour, describing managers who were aware of each of their employees' personal lives and would notice if an employee was behaving differently. A Local Government manager explained that this was about *"Being alert to recognising that the pressure or stress that people are complaining about is different from the normal pressure or stress"*.

Positive examples also referred to managers who appreciated how the needs of employees differ between individuals. The following provides a clear example:

"*We've got a mixture of people who are pretty open, like to share these things, will seek assurance or discussion, help about these sort of things like workload. Others who are fairly closed and it's - you need a different approach to try and get them to talk about it. You've got to look at personalities and it's about that perception. One of my team's perception was that it* <workload> *was fine but this other girl, it wasn't fine, she didn't like it, she wasn't coping, it stressed her out, it was making her ill you know*." Healthcare manager

Examples of negative behaviour in this category were about managers who didn't seem to take issues seriously, or who didn't pick up the signs that an employee was in difficulty. A Central Government manager sums this up as managers who are *"failing to deal with the feeling content of people even though they may have resolved what appears to be a practical and concrete problem*."

A clear example of this happening is as follows:

"I misread the fact that she was an extrovert so talks rabidly and effectively so in a lot of cases you would assume people are talking, therefore they're alright. But it was actually a sign of stress with her, she would talk uncontrollably when she was stressed and because I didn't know her very well and that was her reputation anyway that she talked a lot. And I took that as normal so I could have got to know her better and understand what the signs were when she was coping and when she wasn't coping." Healthcare manager

To summarise, in the first stage of the analysis, 4,764 behaviours were extracted from 369 transcripts and coded using content analysis into 19 competencies. In this process it was found that over half of all interviewees referred to the competencies of 'Managing workload and resources', 'Participative approach', 'Communication', 'Individual consideration' and 'Empathy' as examples of effective or ineffective stress management behaviour. These five competencies also had the highest frequency of mentions. The next stage of analysis involved mapping the emergent 19 competencies onto the HSE Management Standards.

3.2 MAPPING THE 'MANAGEMENT COMPETENCIES FOR PREVENTING AND REDUCING STRESS AT WORK' FRAMEWORK ONTO THE HSE MANAGEMENT STANDARDS

The Management Competency framework was mapped onto the HSE Management Standards using the procedure described in section 2.6.

Table 3.3 Management Competency framework mapped onto HSE Management Standards

Stress management competency	*Management Standard*	*Definition of Management Standard*
Managing workload and resources Dealing with work problems Process Planning and Organisation	Demands	Includes issues like workload, work patterns and the work environment
Empowerment Participative approach Development	Control	How much say the person has in the way they do their work
Accessible/Visible Health and Safety Feedback Individual Consideration	Support	Includes the encouragement, sponsorship and resources provided by the organisation, line management and colleagues
Managing Conflict Expressing and Managing Emotions Acting with Integrity Friendly Style	Relationships	Includes promoting positive working to avoid conflict and dealing with unacceptable behaviour
Communication	Role	Whether people understand their role within the organisation and whether the organisation ensures that the person does not have conflicting roles
	Change	How organisational change is managed and communicated in the organisation
Knowledge of Job Taking Responsibility Empathy Seeking Advice	Other	

'Development' sits within the 'Control' category because the 'Control' Management Standard 'states to be achieved/what should be happening' includes the statement 'employees are encouraged to develop new skills to help them undertake new and challenging pieces of work' and 'the organisation encourages employees to develop their skills'. Although the competency of 'Knowledge of Job' appears at first glance to sit within the 'Role' Management Standard, on closer examination it can be seen it does not: the competency 'Knowledge of Job' refers to the manager understanding both their own role and the different tasks of their employees, whereas the 'Role' Management Standard refers to employers/managers ensuring employees themselves understand the role that employees are expected to perform (e.g. providing clear guidelines or role descriptions for employees).

Four of the competencies ('Knowledge of Job', 'Taking Responsibility', 'Empathy' and 'Seeking Advice') could not be mapped directly onto any of the six Management Standards as they to refer to behaviours that do not relate to any of the Management Standard definitions.

3.2.1 Frequency of mentions of behaviours relating to each of the HSE Management standard areas

Table 3.4 Management Competency framework with percentage frequency of mentions for each Management Standard Area

Management Standard	*% of sample who referred to MS Area*	*% frequency of mentions*	*% of sample who referred to positive*	*% positive mentions*
Demands	91	26	80	62
Support	86	20	77	75
Control	83	19	79	80
Relationships	66	12	48	51
Role/ Change	63	10	49	65
Other	76	15	64	73

91% of those interviewed referred to behaviours relating to the Management Standard of 'Demands', 80% of those interviewed referred to positive indicators of 'Demands' at least once and behaviours related to 'Demands' made up over a quarter (26%) of the total number of behaviours mentioned by interviewees. 'Demands' includes behaviours from the competencies 'Managing workload and resources', 'Process Planning and Organisation' and 'Dealing with work problems'. Mentions of competencies related to the Management Standard areas of 'Support' and 'Control' each made up approximately one fifth of all comments from interviewees (20% and 19% respectively).

Across all six Management Standard areas, the majority of behaviours referred to were positive behavioural indicators; however within 'Relationships' the balance between positive and negative behavioural indicators was more evenly split with negative comments making up 49% of the total number of comments. 'Relationships' included the competencies of 'Managing Conflict', 'Expressing and Managing Emotions', 'Acting with Integrity' and 'Friendly Style'. It is interesting to note that 76% of the those interviewed referred to behaviours that fell outside of the six Management Standards, in fact the 'Other' category made up 15% of the total number of behaviours mentioned by interviewees – more than either 'Relationships' or 'Role and Change'.

To summarise from section 3.2, mapping the 'Management Competencies for Preventing and Reducing Stress at Work' framework onto the HSE Management competencies revealed that four competencies ('Knowledge of Job', 'Taking responsibility', 'Empathy', and 'Seeking Advice'). Comments relating to 'Demands' were referred to by 91% of interviewees, and made up over a quarter (26%) of the total number of comments by interviewees. Interesting, 76% of interviewees referred to behaviours that sat outside of the six Management Standard Areas.

Once the data had been explored in terms of the competencies and how they mapped onto the Management Standard areas, the next stage was to explore differences or similarities in the content of manager and employee interviewees. Section 3.3 that follows refers to this stage of analysis.

3.3 COMPARING CONTENT BETWEEN MANAGER AND EMPLOYEE INTERVIEWS

Of the 4,764 behavioural indicators extracted, 2,320 were from managers, equating to an average of 14.50 behaviours per transcript and 2,413 from employees, equating to an average of 11.55 behaviours per transcript.

3.3.1. Comparing Managers and Employees by competency

Table 3.5 Management Competency framework with percentage of those who referred to competency and percentage frequency of mentions for each competency for managers and employees

Competency	*% of Employees who referred to competency*	*% of Managers who referred to competency*	*% frequency of mentions by Employee*	*% frequency of mentions by Manager*
Managing workload and resources	76	79	15	13
Participative approach	69	66	10	13
Communication	66	60	9	11
Individual Consideration	61	61	9	9
Accessible/Visible	49	49	7	6
Empathy	51	53	6	10
Dealing with work problems	42	39	6	6
Process Planning and Organisation	51	41	5	8
Acting with Integrity	29	28	5	2
Taking Responsibility	32*	43*	5	3
Empowerment	31	30	4	3
Feedback	32	32	4	4
Friendly Style	29	38	3	4
Expressing and managing own emotions	23	27	3	2
Development	30	23	3	3
Knowledge of Job	20	23	3	1
Health and Safety	6	6	1	1
Managing Conflict	13	11	1	1
Seeking Advice	9	10	0	1

* Denotes significant difference: χ^2 (1) = 4.26, p <0.05.

In general, the percentage of managers and employees who referred to particular competencies follows a similar pattern, with only minor differences. Three competencies showed larger differences, namely 'Process Planning and organisation' which 51% of employees compared to only 41% of managers referred to, 'Taking Responsibility' which 43% of managers referred to compared to only 32% of employees, and 'Friendly Style' which 38% of managers referred to, compared to only 29% of employees. However, only for 'Taking Responsibility' was this difference found to be statistically significant.

When looking at percentage frequency of mentions of each competency, the pattern of responses from managers and employees again appears to be very similar. 11 of the 19 competencies show between 0 and 1% discrepancy in percentage frequency of mentions. Those competencies with the highest discrepancy between employee and manager are 'Participative approach', 'Empathy', 'Process Planning and Organisation' and 'Acting with Integrity'. In all cases except for 'Acting with Integrity', managers mentioned the competency more frequently than employees.

Table 3.6 Percentage of those who referred to and percentage frequency of positive indicators for managers and employees by competency

Competency	*% of Employees who referred to positive indicators*	*% of Managers who referred to positive indicators*	*% frequency of positive mentions by Employee*	*% frequency of positive mentions by Manager*
Managing workload and resources	61	64	55	77
Dealing with work problems	31	29	55	65
Process Planning and Organisation	35*	25*	40	77
Empowerment	25	19	63	73
Participative approach	63	60	71	94
Development	28	22	88	96
Accessible/Visible	38	42	60	87
Health and Safety	4	5	31	100
Feedback	25	28	61	94
Individual Consideration	56	57	81	95
Managing Conflict	6	6	26	58
Expressing and managing own emotions	9	13	25	53
Acting with Integrity	11	15	17	85
Friendly Style	29	36	85	98
Communication	50	48	48	78
Knowledge of Job	14	12	41	84
Taking Responsibility	23	30	49	88
Empathy	44	46	65	87
Seeking Advice	9	10	100	100

*Denotes significant difference: χ^2 (1) = 4.21, p <0.05.

Although there are only very small differences between managers and employees in terms of the frequency of mentions in each competency, there are larger differences in the degree to which managers and employees mentioned positive and negative behaviours. When examining the frequency of positive and negative behavioural indicators, it is apparent that in all cases managers mention positive behavioural indicators of each competency much more frequently than employees: i.e. employees offered many more examples of ineffective management behaviour for each competency than managers. The only exception is 'Seeking Advice', where for both Managers and Employees there was 100% positive indicators. Despite this striking difference in frequency of mentions, when examining the number of employees and managers who referred to positive indicators of each competency, there is far less differentiation. In other words, in general, just as many employees as managers come up with at least one positive indicator, but employees are more likely to also mention negative indicators. The largest discrepancy was in the competency of 'Process Planning and Organisation' where 35% of employees referred to positive indicators of this competency but only 25% of managers. This is illustrated in table 3.6.

It is interesting to note, as shown in section 2.4.1, that the same interview questions were posed to both employees and managers. The only difference was that managers were being asked to give examples of their own ineffective/effective behaviour, whilst employees were asked to give examples of their manager's ineffective/effective behaviour.

The three competencies with the largest discrepancies in terms of frequency of positive mentions were 'Health and Safety' (69% difference in positive indicators), 'Acting with Integrity' (68%) and 'Knowledge of Job' (43%). Within 'Health and Safety', all mentions (except one) came from one particular Local Government organisation where employees were very concerned that they were being asked to complete tasks by their managers that were unsafe. An example follows:

"*When you refuse to do jobs because it's against our safety training or because you consider it dangerous or not our manager says 'You have to do it, other people do it, you're just being awkward'....and they get antagonistic towards you over you refusing to do something. Even though the paperwork's there, protecting you. If you ask for a safety evaluation sheet, they will not give it you. They'd rather keep you in the dark so you don't know, until an accident happens and then blame it on you*."

Once differences between the content of manager and employee interviews on each of the competencies had been established, it was important to see how this difference corresponded to Management Standard areas.

3.3.2 Exploring significant differences between managers and employees by Management Standard area

Table 3.7 Percentage of those who referred to, and percentage frequency of mentions for managers and employees by Management Standard Area

Management Standard	*% of Managers who referred to area*	*% of Employees who referred to area*	*% frequency of mentions by Managers*	*% frequency of mentions by Employees*
Demands	91	91	27	26
Control	80	85	19	17
Support	88	85	20	21
Relationships	66	65	9	12
Role/Change	60	66	11	9
Other	79	74	15	14

As demonstrated in table 3.7, both the percentage of those who referred to, and the percentage frequency of mentions by managers and employees is similar across all five Management Standard areas and 'Other' (those competencies that lay outside of the six Management Standard areas). No statistically significant differences were found between the percentage frequency of mentions by Managers and Employees across each of the Management Standard areas.

Table 3.8 Percentage of those who referred to, and percentage frequency of positive mentions for managers and employees by Management Standard Area

Management Standard	*% of managers who referred to positive indicators*	*% of employees who referred to positive indicators*	*% positive mentions by Managers*	*% positive mentions by Employees*
Demands	79	82	73	50
Control	73	79	88	74
Support	81	77	94	58
Relationships	53	44	74	38
Role/Change	48	50	78	48
Other	66	62	88	55

There are few differences between the overall percentage of Managers and Employees who referred to positive indicators of each Management Standard, although 9% fewer employees referred to positive indicators in the area of 'Relationships' than managers.

There are however much greater differences between the percentage frequency of positive mentions in each area by Manager and Employee, with managers in all cases mentioning more examples of positive management behaviour than employees. Despite this, no statistically significant differences were found between the percentage frequency of positive mentions by Managers and Employees across each of the Management Standard areas.

To summarise the results from section 3.3 which explored manager and employee differences; the following findings emerged:

- Managers mentioned an average of 14.50 behaviours per transcript compared to only 11.55 per transcript for employees.

- In general, the percentage of interviewees who referred to particular competencies, and the percentage frequency with which each competency was mentioned, followed a similar pattern for managers and employees. One exception was a significant difference in the percentage of managers and employees who referred to the competency of 'Taking Responsibility'.

- Although an equivalent number of managers and employees referred to positive indicators of each competency (with the exception of 'Process Planning and Organisation'), managers mentioned fewer examples of negative behavioural of each competency than employees.

Once the data had been explored in terms of the differences between the content of manager and employee interviews, the next stage was to explore similarities and differences across different sectors. Section 3.4 that follows refers to this stage of analysis.

3.4 COMPARING CONTENT OF INTERVIEWS BY SECTOR

Table 3.9 Breakdown of behavioural indicators by sector

Sector	*Total number of behavioural indicators*	*Average no. of indicators per transcript*
Finance	972	12.15
Healthcare	1110	14.05
Local Government	993	15.05
Central Government	1042	13.03
Education	647	10.11

The lowest number of behavioural indicators per transcript came from Education interviewees with an average of only 10.11 per transcript. A Kruskal-Wallis test found an overall significant difference in frequency of competencies by sector (χ^2 (4) = 9.86, p <0.05) meaning that overall there was a significant difference between the number of mentions across sector, seen by the fact that the average number of indicators or mentions per transcript varies from 10.11 in Education, to 15.05 in Local Government.

3.4.1 Comparing Frequencies of competencies by Sector

Table 3.10 Management Competency framework with percentage of sample that referred to each competency by sector

Competency	*% sample who referred to competency in each sector*				
	Finance	*Healthcare*	*Local Gov.*	*Central Gov.*	*Education*
Managing workload and resources	77	73	86	74	78
Dealing with work problems	46	39	39	41	38
Process Planning and Organisation	53	54	41	48	37
Empowerment	37	29	32	30	23
Participative approach	62	70	73	66	68
Development	35	25	25	26	22
Accessible/Visible	47	54	55	50	37
Health and Safety	5	11	6	4	3
Feedback	35	36	34	24	30
Individual Consideration	63	65	62	51	65
Managing Conflict	12	13	20	13	5
Expressing and managing own emotions	24	25	24	19	33
Acting with Integrity	28	26	32	23	35
Friendly Style	36	26	42	28	35
Communication	60	59	69	69	60
Knowledge of Job	14	24	21	20	30
Taking Responsibility	35	29	44	41	35
Empathy	59*	43*	65*	41*	52*
Seeking Advice	12	6	13	10	5

**Denotes significant difference: χ^2 (4) = 12.72, p <0.05.*

In general, the percentage of interviewees who referred to particular competencies follows a similar pattern across all five sectors covered by this research. However, four competencies showed larger differences, namely 'Individual Consideration' where 51% of interviewees in Central Government referred to this competency which was 11% lower than any other sector; 'Accessible/Visible' where 37% of interviewees in Education referred to the competency which was 10% lower than any other sector; 'Development' where 35% of Financial interviewees referred to this competency which was 9% higher than any other sector; and finally 'Expressing and managing own emotions' where 33% of Education interviewees referred to this competency which was 8% higher than any other sector. Interestingly, the only statistically significant difference was that Local Government participants referred to 'Empathy' more than those working in other sectors.

Table 3.11 Management Competency framework with percentage frequency of mentions for each competency by sector

Competency	***% frequency of mentions by sector***				
	Finance	***Healthcare***	***Local Gov.***	***Central Gov.***	***Education***
Managing workload and resources	15	14	10	16	15
Dealing with work problems	5	5	7	7	6
Process Planning and Organisation	6	6	6	6	8
Empowerment	2	5	4	4	4
Participative approach	12	13	10	11	12
Development	2	3	3	3	5
Accessible/Visible	7	7	5	7	5
Health and Safety	0	0	2	0	0
Feedback	3	3	5	4	5
Individual Consideration	11	10	9	7	6
Managing Conflict	1	1	2	1	2
Expressing and managing own emotions	2	3	4	3	2
Acting with Integrity	2	4	4	4	3
Friendly Style	3	3	3	5	4
Communication	12	8	10	10	11
Knowledge of Job	1	2	3	1	2
Taking Responsibility	3	3	5	5	5
Empathy	10	7	8	9	6
Seeking Advice	1	1	1	0	1

In general, the pattern of responses from interviewees in different sectors appears, when looking at percentage frequency of mentions of each competency, to be very similar. The competency with the highest discrepancy between sectors is 'Managing Workload and Resources', where the percentage frequency of mentions by interviewees from Local Government was 4% lower than in any other sector.

Table 3.12 Management Competency framework with percentage of sample that referred to positive indicators of each competency by sector

Competency	*% of those who referred to positive indicators*				
	Finance	***Healthcare***	***Local Gov.***	***Central Gov.***	***Education***
Managing workload and resources	65	51	69	64	63
Dealing with work problems	33	25	32	30	30
Process Planning and Organisation	38	34	31	26	22
Empowerment	29	20	28	20	13
Participative approach	54	65	66	61	62
Development	32	23	24	25	22
Accessible/Visible	42	40	44	43	28
Health and Safety	4	6	6	3	0
Feedback	29	35	28	20	20
Individual Consideration	59	60	58	48	58
Managing Conflict	6	5	10	4	1
Expressing and managing own emotions	12	14	10	6	1
Acting with Integrity	17	10	20	10	1
Friendly Style	33	26	41	28	33
Communication	49	41	55	54	45
Knowledge of Job	6	13	13	16	17
Taking Responsibility	22	19	34	31	27
Empathy	49	38	56	36	47
Seeking Advice	12	6	13	10	1

Table 3.13 Management Competency framework with percentage frequency of positive mentions for each competency by sector

Competency	***% frequency of positive mentions by sector***				
	Finance	Healthcare	Local Gov.	Central Gov.	Education
Managing workload and resources	67	68	51	66	73
Dealing with work problems	64	48	66	56	71
Process Planning and Organisation	53	73	48	59	73
Empowerment	76	67	70	52	87
Participative approach	87	84	81	80	89
Development	100	94	79	97	90
Accessible/Visible	73	79	52	82	63
Health and Safety	100	75	50	100	100
Feedback	88	85	67	66	76
Individual Consideration	94	89	78	86	95
Managing Conflict	80	73	31	9	38
Expressing and managing own emotions	43	39	28	35	43
Acting with Integrity	42	40	29	39	32
Friendly Style	94	87	76	96	97
Communication	67	74	51	68	59
Knowledge of Job	69	70	38	53	64
Taking Responsibility	68	73	52	65	66
Empathy	82	77	85	71	78
Seeking Advice	100	100	100	100	100
Overall	76*	73*	60*	67*	73*

**Denotes significant difference: χ^2 (4) = 11.242, p <0.05.*

Although all sectors show a similar pattern in terms of the percentage of those who referred to positive indicators of each competency, when examining the frequency of positive and negative behavioural indicators (see table 3.13 above), a pattern emerges revealing that Local Government overall have a higher percentage of negative mentions (or lower percentage of positive mentions) than other sectors. A Kruskal Wallis test demonstrated a significant difference between the overall frequency of positive mentions by sector. The pattern of positive mentions for Local Government was also different to that in other sectors, with a particularly marked discrepancy in eight of the competencies ('Managing workload and resources', 'Accessible/Visible', 'Taking Responsibility', 'Health and Safety', 'Knowledge of Job', 'Communication', 'Friendly Style' and 'Development').

When examining this further, it is clear that the Local Government statistics are being affected by one particular organisation. When the data excluding this particular organisation is examined, it is found to be in line with other sectors in most of the competencies, although the frequency of positive mentions in 'Accessible/Visible', 'Knowledge of Job' and 'Friendly style' remain lower in Local Government sector than in any other sector.

Examining other sectoral differences in positive mentions for each of the competencies shows that: Central Government interviewees have a lower percentage of positive mentions relating to 'Empowerment' than other sectors (52%), while Education interviewees have a higher percentage of positive mentions (87%) of this competency. For 'Managing Conflict', Financial participants have a higher percentage of positive mentions than any other sector (80%) and Central Government a much lower percentage (9%); however, these latter percentages must be interpreted with caution due to the relatively small total number of behavioural indicators given for 'Managing Conflict', which may be responsible for inflating any differences between sectors.

Once differences between the content of interviews by sector on each of the competencies had been established, it was important to see how this difference corresponded to Management Standard areas.

3.4.2 Exploring significant differences between sectors by Management Standard area

Table 3.14 Percentage of those who referred to each Management Standard Area by Sector

Management Standard	***% of those who referred to by sector***				
	Finance	Healthcare	Local Gov.	Central Gov.	Education
Demands	91	89	93	94	88
Control	83	79	86	88	78
Support	85	88	89	81	90
Relationships	64	69	70	58	68
Role/Change	60	59	69	69	60
Other	78	70	85	73	78

Table 3.15 Percentage frequency of mentions by Management Standard Area by Sector

Management Standard	***% frequency of mentions by sector***				
	Finance	Healthcare	Local Gov.	Central Gov.	Education
Demands	26	25	23	29	29
Control	16	21	17	18	21
Support	21	20	21	17	16
Relationships	8	11	13	10	12
Role/Change	12	8	10	10	11
Other	15	13	17	14	14

Both the percentage of those who referred to each area and the percentage frequency of mentions by sector follow a similar pattern across all five Management Standard areas (and 'Other'), using the merged competency variables representing each of the Management Standard Areas. Separate Kruskal Wallis tests were run on each Management Standard area in order to identify significant difference by sector by Management Standard Area. No statistically significant differences were found across the five sectors.

Table 3.16 Percentage of those who referred to positive indicators by Management Standard Area by Sector

Management Standard	***% of those who referred to positive indicators by sector***				
	Finance	Healthcare	Local Gov.	Central Gov.	Education
Demands	83	76	82	84	77
Control	77	74	82	80	70
Support	79	79	83	74	78
Relationships	47	49	58	41	47
Role/Change	42	41	55	54	45
Other	62	55	76	60	68

Table 3.17 Percentage frequency of positive mentions by Management Standard Area by Sector

Management Standard	***% frequency of positive mentions by sector***				
	Finance	Healthcare	Local Gov.	Central Gov.	Education
Demands	63	65	55	62	72
Control	87	81	78	76	89
Support	86	85	67	81	78
Relationships	65	56	40	57	60
Role/Change	67	74	51	68	59
Other	79*	77*	67*	68*	73*

**Denotes significant difference: χ^2 (4) = 12.363, p <0.05.*

Although the percentage of those who referred to positive indicators across each sector is similar, there are differences in the frequency of positive mentions by sector. Local Government interviewees mentioned less positive indicators of the Management Standard area of 'Demands', 'Relationships' and 'Role/Change' than any other sector. Separate Kruskal Wallis tests were run on each Management Standard area in order to identify significant difference in frequency of positive mentions by sector by Management Standard Area. A statistically significant difference was found between sectors on the percentage frequency of positive mentions of the competencies making up the area of 'Other' (those four competencies that sat outside of the Management Standard areas).

To summarise the results from section 3.4 which explored sector differences; the following findings emerged:

- There was a significant difference in the total frequency of behaviours across sectors. Education interviewees had the lowest number of behavioural indicators per transcript at 10.11, compared to 15.05 for Local Government employees.

- In general, across all five sectors, both the percentage of interviewees who referred to particular competencies, and the percentage frequency with which they were mentioned follows a similar pattern. The exception was 'Empathy', where there was a significant difference between the percentage of interviewees in each sector referring to the competency.

- There was also a significant difference in the percentage frequency of positive indicators by sector. The pattern emerged that Local Government had a higher percentage of negative mentions than other sectors, although further analysis revealed this difference, in the large part, due to the influence of one particular participating organisation.

Once the interview data had been explored in terms of the differences between the content of manager and employee interviews and by sector, the next stage was to analyse information from the manager and employee written exercises. Section 3.5 that follows refers to this stage of analysis.

3.5 ANALYSIS OF EMPLOYEE AND MANAGER WRITTEN EXERCISE

Content analysis was conducted on the 282 written exercises completed by managers and employees, using the 'Management Competencies for Preventing and Reducing Stress at Work' framework identified in 3.1 as the basis. From this exercise data, a total of 2,508 behaviours were extracted. A frequency analysis of the resulting behavioural data was then conducted, with results as shown in table 3.18.

Table 3.18 Management Competency framework with percentage frequency of entries on written exercise for each competency (ranked by percentage frequency of entry)

Competency	***% frequency of entries***	***% of positive entries***	***% of negative entries***
Communication	19	*53*	*47*
Managing workload and resources	15	*35*	*65*
Participative approach	15	*68*	*32*
Empowerment	11	*50*	*50*
Dealing with work problems	6	*43*	*57*
Development	5	*69*	*31*
Individual Consideration	5	*76*	*24*
Accessible/Visible	4	*40*	*60*
Feedback	4	*56*	*44*
Process Planning and Organisation	3	*61*	*39*
Acting with Integrity	3	*40*	*60*
Managing Conflict	3	*29*	*71*
Taking Responsibility	2	*29*	*71*
Empathy	1	*47*	*53*
Friendly Style	1	*68*	*32*
Expressing and managing own emotions	1	*13*	*87*
Knowledge of Job	1	*42*	*58*
Health and Safety	0	-	-
Seeking Advice	0	-	-

17 of the 19 competencies were included in the written exercise (only 'Health and Safety' and 'Seeking Advice' were not mentioned). The most common theme of behaviours given in this written data was 'Communication': entries relating to this competency made up almost a fifth of the total number of entries (19%). Within this theme, the number of positive and negative entries was approximately evenly split.

A comparison exercise was then carried out to see how the content of the entries from the written exercise differed from the content of the interviews, in order to triangulate the data. The results of this comparison are shown in table 3.19.

Table 3.19 Comparison between percentage frequency of verbal/interview mentions and percentage frequency of entries on written exercise for each competency (ranked by percentage frequency of entry)

Competency	*% frequency of written entries*	*% frequency of verbal mentions*	*Discrepancy*
Communication	19	10	9
Managing workload and resources	15	14	1
Participative approach	15	12	3
Empowerment	11	4	7
Dealing with work problems	6	6	0
Development	5	3	2
Individual Consideration	5	9	4
Accessible/Visible	4	6	2
Feedback	4	4	0
Process Planning and Organisation	3	6	3
Acting with Integrity	3	4	1
Managing Conflict	3	1	2
Taking Responsibility	2	4	2
Empathy	1	8	7
Friendly Style	1	4	3
Expressing and managing own emotions	1	3	2
Knowledge of Job	1	2	1
Health and Safety	0	1	1
Seeking Advice	0	1	1

Broadly, the results from interviews and written exercises follow a similar pattern. Three of the five most frequently mentioned competencies from the interviews ('Communication', 'Managing Workload and resources' and 'Participative approach') were also included in the top five most frequently cited entries on the written exercise. It is interesting however to note particular differences in three of the competencies: 'Communication' which made up 19% of the written entries but only 10% of the interview comments; 'Empowerment', which made up 11% of the written entries but only 4% of the interview comments; and 'Empathy' which made up only 1% of the written entries but 8% of the interview comments.

It is worth noting the difference in the prompts, or methods of questioning that elicited participant responses in these different conditions. In the interview, interviewees were asked to describe their experience of effective and ineffective stress management behaviours: their responses therefore covered a very broad range of comments. By contrast, in the written exercise, entries were sought to fit with the six Management Standard areas. For example, in the case of 'Empowerment', the majority of the entries from this competency came within the 'Control' area, where the definition was given as 'how much say you have over the way you do your work'. This 'leading' of participants may explain the higher percentage frequencies in certain of the competencies.

Further analysis was then carried out to explore whether the competencies identified in the written exercise mapped onto the Management Standard areas in the same way as the mapping conducted in section 3.2. The results of this mapping exercise are shown in the Appendix table 3.0. This comparison exercise demonstrated that there was a larger overlap between Management Standard areas in the written exercise than was indicated by the mapping exercise in section 3.2, which mapped the competencies onto the Management Standards.

- Demands: In response to the written exercise question asking for behavioural indicators relating to 'Demands', although the majority of entries fell, as expected, within the competencies of 'Managing workload and resources', 'Dealing with work problems' and 'Process Planning and Organisation', a substantial minority did not: 9% of entries given in this section related to the competency 'Participative approach', 8% to 'Individual consideration', 6% to 'Empowerment' and 5% to 'Communications'.

- Control: The majority of entries related to the competencies 'Empowerment' and 'Participative approach', as expected. However, 14% related to 'Managing workload and resources' and 3% to each of 'Dealing with work problems', 'Process Planning and organisation' and 'Communications'. Interestingly, no entries given for 'Control' related to 'Development' which is included in the Management Standard definition of control: instead, 'Development'-type behaviours were suggested under 'Support' and 'Role'.

- Support: 'Development' behaviours, along with 'Feedback' were the most common entries in the area (16% each). Other written entries included the competencies as expected from section 3.2, but also a number of entries under the theme of 'Participative approach' (12%), 'Managing workload and resources' (12%), 'Dealing with work problems' (7%) and 'Communication' (3%).

- Relationships: This was perhaps the most mixed area. Although the expected competencies of 'Managing Conflict', 'Expressing and managing emotion', 'Acting with integrity' and 'Friendly style' were included within the area (with percentage frequencies of 17%, 11%, 5% and 3% respectively), the most common theme of entries for this area fell within 'Participative approach' (21%). Other entries included those that fell within the competencies 'Dealing with work problems' (9%), 'Accessible/Visible' (6%), 'Communication' (6%), 'Individual Consideration' (5%), 'Feedback' (3%) and 'Empathy' (3%).

- Role: 'Communication' (42%) was the most frequently reported theme of entries, however 'Development' (11%), 'Participative approach' (10%), 'Managing workload and resources' (9%), 'Empowerment' (6%), 'Individual consideration' (6%), 'Dealing with work problems' (3%) and 'Process Planning and Organisation' (3%) were also reported.

- Change: Again, the most frequent theme of entries was 'Communication' (58%) while other behaviours reported related to 'Participative approach' (25%) and 'Acting with integrity' (4%).

To summarise section 3.5, analysis of the 282 written exercises revealed a similar percentage frequency pattern to that of the interviews. Further findings were that:

- 17 of the 19 competencies were included (excluding 'Health and Safety' and 'Seeking advice', with three of the five most frequently mentioned competencies from interviews also in the top three most frequently mentioned competencies in the written exercise ('Communication', 'Managing workload and resources' and 'Participative approach').

- Mapping the written exercise onto the Management Standards revealed competencies falling into more than one Management Standard area to a greater extent than was foreseen in the researchers' mapping of the competencies onto Management Standard areas.

Following analysis of the data emerging from the manager and employee written exercise, the next stage of analysis was to explore the data emerging from the HR written exercise.

3.6 ANALYSIS OF HR WRITTEN EXERCISE

Content analysis was conducted on the transcribed post-it notes from the exercise in the two HR workshops using the 'Management Competencies for Preventing and Reducing Stress at Work' framework identified in section 3.1. A total of 331 behaviours were gathered from the two workshops. This enabled frequency analysis of the results. The table below shows the results of this analysis.

Table 3.20 Management Competency framework with percentage frequency of behaviours from HR exercise for each competency (ranked by percentage frequency of behaviours)

Competency	***% frequency of behaviours***	***% of positive entries***	***% of negative entries***
Participative approach	18	*69*	*31*
Managing workload and resources	13	*28*	*72*
Communication	12	*44*	*56*
Empowerment	10	*44*	*56*
Dealing with work problems	7	*26*	*74*
Accessible/Visible	5	*19*	*81*
Feedback	5	*56*	*44*
Acting with Integrity	5	*20*	*80*
Individual Consideration	4	*75*	*25*
Process Planning and Organisation	4	*54*	*46*
Empathy	4	*38*	*62*
Expressing and managing own emotions	4	*14*	*86*
Taking Responsibility	4	*50*	*50*
Friendly Style	2	*60*	*40*
Knowledge of Job	2	*17*	*83*
Development	2	*100*	*0*
Managing Conflict	1	*0*	*100*
Health and Safety	0	-	-
Seeking Advice	0	-	-

As found with the written exercise results in section 3.5, the following emerged:

- 17 of the 19 competencies were included in the written exercise (again 'Health and Safety' and 'Seeking Advice' were not mentioned).

- The most common entry related to the competency 'Participative Approach', with entries of this type making up almost a fifth of the total number of entries (19%). Consistent with both the interview data (section 3.1) and the written exercise data (section 3.5), 'Participative Approach', 'Managing Workload and Resources' and 'Communication' were the most frequently cited competencies.

- Analysis was conducted to explore whether the competencies identified in the HR exercise mapped onto the Management Standard areas in the same way as the mapping framework suggested in section 3.2. The results of this mapping exercise are shown in Appendix table 3.1. It showed considerable overlap with the written exercise described above, though it was more fragmented, possibly due to the group setting, time restraints and small sample size. It is therefore not reported here.

3.7 COMPARING CONTENT BY DATA SOURCE

A comparison exercise was carried out to see how the content of the behaviours differed by each data source, i.e. from HR exercise, written exercise and interview. The results of this comparison are shown in table 3.21.

Table 3.21 Comparison between percentage frequency of behaviours for HR exercise, percentage frequency of mentions in interviews, and percentage frequency of entries on written exercise for each competency

Competency	*% frequency of behaviours for HR exercise*	*% frequency of mentions in interview*	*% frequency of entries in written exercise*
Managing workload and resources	13	14	15
Dealing with work problems	7	6	6
Process Planning and Organisation	4	6	3
Empowerment	10	4	11
Participative approach	18	12	15
Development	2	3	5
Accessible/Visible	5	6	4
Health and Safety	0	1	0
Feedback	5	4	4
Individual Consideration	4	9	5
Managing Conflict	1	1	3
Expressing and managing own emotions	4	3	1
Acting with Integrity	5	4	3
Friendly Style	2	4	1
Communication	12	10	19
Knowledge of Job	2	2	1
Taking Responsibility	4	4	2
Empathy	4	8	1
Seeking Advice	0	1	0

Broadly, the results from all three sources follow a similar pattern. The same three competencies ('Communication', 'Managing Workload and resources' and 'Participative approach') were the three most frequently mentioned competencies in the HR exercise, interviews and written exercise although in slightly different orders for each data source.

As with the written exercise, the method of data-gathering for HR professionals was very different to that of the interview. HR professionals were asked to write down examples of manager behaviour that could cause, prevent or alleviate stress. As participants were asked to write behaviours before fitting them into the management standard areas, it would be expected that the results would more closely mirror the interview data than the written data. However, it is apparent from table 3.21 that this is not always the case. For example, for 'Participative approach', 'Empowerment' and 'Individual Consideration' there is more of a match between HR and written exercise results. For the competency 'Communication', there is more of a match between HR and interview results.

3.8 COMPARING CONTENT BY PARTICIPANT GROUP

A comparison exercise was then carried out to see how the content of the behaviours differed by each participant group, i.e. from managers, employees and HR professionals. The results of this comparison are shown in table 3.22.

Table 3.22 Comparison of percentage frequencies between employee and manager interviews and HR exercise

Competency	*% frequency of mentions for Employees*	*% frequency of mentions for Managers*	*% frequency of mentions for HR Professionals*
Managing workload and resources	15	13	13
Dealing with work problems	6	6	7
Process Planning and Organisation	5	8	4
Empowerment	4	3	10
Participative approach	10	13	18
Development	3	3	2
Accessible/Visible	7	6	5
Health and Safety	1	1	0
Feedback	4	4	5
Individual Consideration	9	9	4
Managing Conflict	1	1	1
Expressing and managing own emotions	3	2	4
Acting with Integrity	5	2	5
Friendly Style	3	4	2
Communication	9	11	12
Knowledge of Job	3	1	2
Taking Responsibility	5	3	4
Empathy	6	10	4
Seeking Advice	0	1	0

Table 3.22, showing a comparison between the percentage frequency of mentions of each competency by employees and managers in interviews, and by HR professionals in the post-it note exercise, demonstrates that the three participant groups showed similar patterns of mentions of competencies. The most frequently mentioned competencies in all three groups were 'Managing Workload and Resources', 'Participative Approach' and 'Communication'. It is interesting to note that HR professionals mentioned 'Individual consideration' less often and 'Empowerment' more often than either Managers or Employees. Managers mentioned 'Empathy' more than either employees or HR professionals, and 'Acting with Integrity' less than either Employees or HR professionals.

3.9 COMPARING COMPETENCIES BY TYPE OF STRESS MANAGEMENT

When initiating this research, an area of interest was to try to identify four different types of manager behaviour, relating to prevention, causation, alleviation and aggravation of stress. This would separate out managers' behaviour having a direct impact on employees (preventing or causing stress) from that having an impact on the extent to which pre-existing stress situations caused employee harm (alleviating or aggravating stress). While these four situations appear conceptually different, the empirical data gathered shows that they are actually difficult to distinguish in real life situations. In a particular scenario, identifying whether a manager's behaviour has prevented stress or alleviated stress involves making a subjective judgement about the impact of multiple factors; the same applies to causation versus aggravation. It is therefore not possible to specify particular competencies/behaviours as being exclusively preventative, causative, alleviatory or aggravating. However, a few observations can be made about which competencies are most likely to include behaviours of each kind.

As a general rule, the positive behavioural indicators included in the stress management competency framework would be preventative and/or alleviatory and the negative behavioural indicators causative and/or aggravating. The majority of the competencies include positive behavioural indicators that represent both preventative and alleviatory stress management behaviours. However, the positive behavioural indicators for some of the competencies are more likely to be preventative than alleviatory: 'Process Planning and Organisation', 'Empowerment', 'Expressing and Managing Emotion' and 'Acting with Integrity' fall into this category. Conversely, 'Taking Responsibility' is more likely to include alleviatory behaviours.

It is interesting to note that some of the competencies include positive behavioural indicators that have the potential to cause stress, despite their apparent positive intention. This could be the case with the following four competencies: 'Development', 'Health and Safety', 'Managing Conflict' and 'Communication'. For example, one of the behavioural indicators within 'Development' is 'Helps employees to develop within the role'. In most cases this would be a positive, stress preventing/ alleviating behaviour. However, if an employee does not want to develop and progress up the career ladder, with the additional responsibilities that come with that change, then having a manager who is trying to help them develop is potentially stressful. Another example, in the competency 'Communication', is the behavioural indicator 'Keeps team informed of what is happening in the organisation'. If a manager gives employees the whole, honest picture when it involves bad news, but does not manage the impact of that news on individuals, a potentially stress-causing situation is created. Thus, it is clear that the competencies need thoughtful application to real life situations and that they may operate in synergy with one another (e.g. if the above competencies were combined with the 'Empathy' competency, that might mitigate any potential stress risk).

3.10 MAPPING THE 'MANAGEMENT COMPETENCIES FOR PREVENTING AND REDUCING STRESS AT WORK' FRAMEWORK ONTO OTHER FRAMEWORKS

3.10.1 Mapping onto other management frameworks

In order to compare the competencies identified within the 'Management Competencies for Preventing and Reducing Stress at Work' framework with those highlighted by some of the most common general management frameworks, a mapping exercise was conducted using five frameworks: the Great 8 Competency Framework (Kurz & Bartram, 2002), the Transformational Leadership Questionnaire – public and private sector versions (TLQ, Alimo-Metcalfe & Alban Metcalfe, 2001), The Multi-Factor Leadership Questionnaire (MLQ5x, Bass & Avolio, 1994) and the Leader Behaviour Description Questionnaire (LBDQ, Stogdill, 1963) that were explored in Section 2.6. The summary of this exercise is shown in table 3.23 below. For the full results of this mapping exercise, refer to Appendix 2.7.

Table 3.23 Mapping of Emergent Management Competencies onto five management frameworks

SMC Competency	*Great 8*	*TLQ (Public)*	*TLQ (Private)*	*MLQ 5X*	*LBDQ*
Managing Workload and Resources	✓	✓	×	×	✓
Dealing with Work problems	✓	✓	✓	✓	✓
Process Planning and Organisation	✓	×	×	×	✓
Empowerment	×	✓	✓	×	×
Participative Approach	✓	✓	✓	✓	✓
Development	×	✓	✓	✓	×
Accessible/Visible	×	✓	✓	✓	✓
Health and Safety	×	×	×	×	✓
Feedback	×	×	✓	✓	×
Individual Consideration	✓	✓	✓	✓	✓
Managing Conflict	×	×	×	✓	×
Expressing and Managing Emotions	✓	×	×	×	×
Acting with Integrity	✓	✓	✓	✓	✓
Friendly Style	✓	✓	✓	×	✓
Communication	✓	✓	✓	✓	✓
Knowledge of Job	×	×	✓	×	×
Taking Responsibility	✓	✓	×	×	×
Empathy	✓	✓	✓	✓	✓
Seeking Advice	×	×	×	✓	×

It is interesting to note that, although each of the 19 competencies appears in at least one of the Management Frameworks, none of the Management Frameworks includes all the competencies. Six of the competencies are included in all five of the frameworks, namely 'Dealing with Work problems', 'Participative approach', 'Individual Consideration', 'Acting with Integrity', 'Communication' and 'Empathy'. Four of the competencies only appear in one of the Management Frameworks, namely 'Health and Safety', 'Managing Conflict' 'Seeking advice' and 'Knowledge of Job'.

This mapping can also be explored in light of the theories discussed in Section 1.2.3 (Task and Relationship Based behaviour) and Section 1.2.4 (Transformational and Transactional Behaviours). From this perspective, the competencies for preventing and reducing stress at work can be seen to include both task-based (for instance 'Managing Workload and Resources') and relationship-based (for instance 'Expressing and Managing Emotions'), as well as both transactional (for instance 'Dealing with Work problems') and transformational (for instance 'Acting with Integrity') competencies. However, the framework developed does not equate directly to one particular theoretical position or general management framework.

3.10.2 Mapping onto sector-specific frameworks

In order to compare the competencies identified within the 'Management Competencies for Preventing and Reducing Stress at Work' framework with those highlighted by sector-specific frameworks for the five sectors covered by the research, a mapping exercise was conducted using the following frameworks:

- National Probation Service Living Leadership Framework (Central Government)
- Sheffield City Council Competent Manager Framework (Local Government)
- National Health Service Knowledge Skills Framework (Healthcare) – note for this exercise core competencies only were mapped
- Financial Ombudsmen Framework (Financial)
- Scottish Standard for Headship (Education)

The summary of this exercise is shown in table 3.24 below. For the full results of this mapping exercise, refer to Appendix 2.8.

Table 3.24 Mapping of Management Competencies for Preventing and Reducing Stress at Work onto five sector-specific frameworks

SMC Competency	*Central Government*	*Local Government*	*Healthcare*	*Financial*	*Education*
Managing Workload and Resources	×	✓	×	✓	✓
Dealing with Work problems	✓	✓	×	✓	✓
Process Planning and Organisation	✓	✓	✓	✓	×
Empowerment	✓	✓	×	×	✓
Participative Approach	✓	✓	✓	✓	✓
Development	✓	✓	✓	✓	✓
Accessible/Visible	×	×	×	✓	✓
Health and Safety	×	×	✓	×	×
Feedback	✓	✓	×	×	✓
Individual Consideration	×	✓	×	×	✓
Managing Conflict	×	×	✓	✓	✓
Expressing and Managing Emotions	×	×	×	✓	✓
Acting with Integrity	✓	✓	✓	✓	✓
Friendly Style	×	×	×	×	✓
Communication	✓	✓	✓	✓	✓
Knowledge of Job	×	×	×	✓	✓
Taking Responsibility	✓	✓	✓	✓	✓
Empathy	×	×	×	×	✓
Seeking Advice	×	✓	×	✓	×

In a similar finding to that of the previous section, each of the 19 competencies appears in at least one of the sector-specific Frameworks, but none of the Frameworks includes all the competencies. In this example, the Scottish Standard for Headship (Education) framework is the most similar to the 'management competencies for preventing and reducing stress at work' framework, including all but three competencies ('Process Planning and Organisation', 'Health & Safety' and 'Seeking Advice'). Just five of the competencies are included in all five of the frameworks, namely 'Participative Approach', 'Development', 'Acting with Integrity', 'Communication' and 'Taking Responsibility'.

3.10.3 Mapping onto national frameworks

In order to compare the competencies identified within the 'Management Competencies for Preventing and Reducing Stress at Work' framework to those highlighted by national frameworks, a mapping exercise was conducted using the following three frameworks:

- Management Standards Framework (as used by Chartered Management Institute)
- Investors in People Framework (IIP)
- DTI Inspirational Leadership Framework.

The summary of this exercise is shown in table 3.25 below. For the full results of this mapping exercise, refer to Appendix 2.9.

Table 3.25 Mapping of Management Competencies for Preventing and Reducing Stress at Work onto three national frameworks

SMC Competency	***Chartered Management Institute***	***Investors in People***	***DTI Inspiring Leadership***
Managing Workload and Resources	✓	×*	✓
Dealing with Work problems	✓	×*	✓
Process Planning and Organisation	✓	✓	✓
Empowerment	×	✓	✓
Participative Approach	✓	✓	✓
Development	✓	✓	✓
Accessible/Visible	×	×*	✓
Health and Safety	✓	×	×
Feedback	×	✓	✓
Individual Consideration	×	✓	✓
Managing Conflict	×	×*	×
Expressing and Managing Emotions	×	×	✓
Acting with Integrity	✓	✓	✓
Friendly Style	×	×	✓
Communication	✓	✓	✓
Knowledge of Job	✓	×	×
Taking Responsibility	✓	×	×
Empathy	×	✓	✓
Seeking Advice	×	×	×

** While these four competencies are not explicitly covered by the IIP framework, they would be within the scope of evidence an IIP assessor would look for.*

None of the three national frameworks used in this section included the competencies of 'Seeking advice' or 'Managing Conflict'. Once again, five of the competencies are included in all three of the frameworks, namely 'Process Planning and Organisation', 'Participative Approach', 'Development' 'Acting with Integrity' and 'Communication'. The most closely matched framework to that of the 'Management Competencies for Preventing and Reducing Stress at Work' framework is the DTI Inspirational Leadership framework, which includes all but five of the competencies for Preventing and Reducing Stress at Work (not included: 'Health and Safety', 'Managing Conflict', 'Knowledge of Job', 'Taking Responsibility' and 'Seeking Advice').

3.11 CHAPTER SUMMARY

- **4,764 behaviours were extracted from 369 transcripts and coded using content analysis into 19 competencies.**

- **Over half of all interviewees referred to the competencies** of 'Managing workload and resources' (77%), 'Participative approach' (68%), 'Communication' (63%), 'Individual consideration' (61%) and 'Empathy' (51%) as effective or ineffective examples of manager stress management behaviours. The same five competencies also had the highest frequency of mentions.

- **Mapping the 'Management Competencies for Preventing and Reducing Stress at Work' framework** onto the HSE Management Standards revealed that four competencies could not be directly mapped onto the standards: 'Knowledge of Job', 'Taking responsibility', 'Empathy' and 'Seeking advice'.

- **Comments relating to 'Demands'** were mentioned by 91% of interviewees and made up over a quarter (26%) of the total number of comments by interviewees.

- **Comparison of Manager and Employee interviews** demonstrated that:

    - Managers mentioned an average of 14.50 behaviours per transcript compared to only 11.55 per transcript for employees.

    - In general, the percentage of interviewees who referred to particular competencies, and the percentage frequency with which each competency was mentioned, followed a similar pattern for managers and employees. One exception was a significant difference between the percentage of managers and employees who referred to 'Taking Responsibility'.

    - Although an equivalent number of managers and employees referred to positive indicators of each competency (with the exception of 'Process planning and organisation' where employees mentioned significantly more positive indicators than managers), managers mentioned fewer negative behavioural indicators of each competency than employees.

- **Comparison of interviews by Sector** showed that:

    - There was a significant difference between the total frequency of behaviours across sectors. Education interviewees had the lowest number of behavioural indicators per transcript (10.11) compared to 15.05 for Local Government interviewees.

    - In general, across all five sectors, both the percentage of interviewees who referred to particular competencies and the percentage frequency with which they were mentioned, followed a similar pattern. The exception was 'Empathy' where there was a significant difference between the percentage of interviewees in each sector referring to the competency.

    - There was also a significant difference in the percentage frequency of positive indicators by sector. The pattern emerges that Local Government had a higher percentage of negative mentions than other sectors, although further analysis revealed this difference was, in the large part, due to the influence of one particular participating organisation.

- **Analysis of the 282 written exercises** (2,508 behavioural indicators) revealed a similar percentage frequency pattern to that of the interviews. 17 of the 19 competencies were included (the only two that were not mentioned were 'Health and Safety' and 'Seeking advice'). Three of the five most frequently mentioned competencies from the interviews ('Communication', 'Managing workload and resources' and 'Participative approach') were also in the top three most frequently mentioned competencies in the written exercise. Mapping the written exercise onto the Management Standards revealed competencies falling into more than one Management Standard area to a greater extent than was foreseen in the researchers' mapping of competencies onto Management Standard areas.

- **Analysis of the 331 behavioural indicators from the HR exercise** showed a similar framework to that of both the interviews and written exercises, with the same 17 competencies included as in the written exercises. The most commonly mentioned competency was 'Participative approach'. The Management Standards mapping was more fragmented, possibly due to the group setting, time restraints and small sample size, than in the written exercise.

- **When comparing by Data Source** (HR, Interview and Written exercise), results indicated that the same competencies were the most frequently mentioned in all three data gathering methods. These were 'Communication', 'Managing workload and resources' and 'Participative approach'.

- **In general, Comparisons by Participant Group** (Employees, Managers and HR professionals), reflected a similar pattern of mentions to each other. The most frequently mentioned competencies in all three groups were 'Managing workload and resources', 'Participative approach' and 'Communication'. HR professionals mentioned 'Individual consideration' less often and 'Empowerment' more often than either Managers or Employees.

- **When comparing competencies by type of stress management**, as a general rule, the positive behavioural indicators included in the 'Management Competencies for Preventing and Reducing Stress at Work' framework were preventative and/or alleviatory and the negative behavioural indicators causative and/or aggravating. However, the positive behavioural indicators for some of the competencies are more likely to be preventative than alleviatory. Further, some of the competencies include positive behavioural indicators that have the potential to cause stress, despite their apparent positive intention.

- **Mapping the 'Management Competencies for Preventing and Reducing Stress at Work' framework onto other management** frameworks (Great 8, TLQ Public, TLQ Private, MLQ 5X and LBDQ) demonstrated that each of the competencies appeared in at least one of the frameworks, but no framework contained all 19 competencies for Preventing and Reducing Stress at Work. Six competencies were included in all five frameworks: 'Dealing with Work problems', 'Participative approach', 'Individual Consideration', Acting with Integrity', 'Communication' and 'Empathy.

- **Mapping the 'Management Competencies for Preventing and Reducing Stress at Work' framework onto sector specific frameworks** demonstrated again that each of the competencies appeared in at least one of the frameworks, but overall there was less of a match than found in the general management frameworks. The framework that was most closely matched to that of the 'Management Competencies for Preventing and Reducing Stress at Work' framework was the Scottish Standard for Headship (Education) framework.

- **Mapping the 'Management Competencies for Preventing and Reducing Stress at Work' framework onto national frameworks** (Chartered Management Institute, Investors in People and DTI Inspirational Leadership) demonstrated that none of the frameworks included competencies of 'Seeking Advice' or 'Managing Conflict'. The most closely matched framework was that of the DTI Inspirational Leadership framework.

4 DISCUSSION AND CONCLUSION

This section provides a summary of the research. It reflects upon how the research has achieved its objectives and considers the strengths and potential bias in the approach adopted.

The current study set out to fill the gap in research using a competency approach to define the behaviours required by managers to manage stress in others. Below, the research is discussed in light of each objective.

Specifically, the three objectives were:

d) To identify the specific management behaviours associated with the effective management of stress at work and build a 'management competency framework for preventing and reducing stress at work'.
e) Within the emerging competency framework, to identify those behaviours that are associated with each of the six Management Standards and those behaviours that are associated with the implementation of the HSE Management Standards e.g. management approaches that underlie all the Management Standards; and
f) To explore the possible integration of the emerging competency framework into existing management competency frameworks.

4.1 IDENTIFYING SPECIFIC MANAGEMENT BEHAVIOURS AND BUILDING A COMPETENCY FRAMEWORK

The main findings of relating to this core aim of the research are summarised below:

- A qualitative study was conducted using the procedure outlined in section 2 of this report combining interviews, written exercises and workshop exercises. Content analysis of the interview data revealed 19 stress management competencies and for all except one of these ('Seeking Advice') provided both positive and negative behavioural indicators. The set of competencies was found to be consistent across the sample: the same competencies were referred to by managers and employees, and by interviewees from all five sectors covered. When considering data gathered from two alternative sources (HR exercise and written exercise), a very similar set of competencies emerged, except that two of the competencies ('Health and Safety' and 'Seeking Advice') were not referred to. These two competencies were also the two referred to by the fewest participants in the interviews, demonstrating a consistent pattern of responses across participant groups and data sources.

- Three competencies, 'Managing Workload and Resources', 'Participative Approach' and 'Communication', were mentioned most frequently across all data sources (interviews, written exercise and HR exercise). These were also the most frequently mentioned competencies for both managers and employees. In fact, looking at both the number of participants who referred to each competency and frequency of mentions, there was little overall difference between managers and employees, or between sectors. Although comparison of frequencies can be helpful in suggesting areas that might repay closer consideration, it is dangerous to make an assumption that differences in frequency of mentions correspond to meaningful differences within or between transcripts (King, 1998). It is therefore important that the next stage of research focus on which of the 19 competencies are felt to be most important, or critical, to both managers and employees, in order to strengthen the rigour of the framework. It is not necessarily the case that managers will be expected to demonstrate all of the 19 competencies, therefore a hierarchy of importance is imperative moving forward.

- Analysis of interview data highlighted differences between the frequency of positive and negative behavioural indicators within each competency. Overall, 16 of the competencies were more frequently mentioned in terms of positive behaviour than negative behaviour, the exceptions being 'Acting with Integrity', 'Expressing and Managing Own Emotions' and 'Managing Conflict'. It appears therefore that to achieve positive stress management outcomes, while the majority of the competencies appear more important in terms of the presence of positive behaviour, a minority may be more important in terms of the absence of negative behaviour. For example, an employee may be more likely to experience a negative impact, and remember, a manager losing their temper in a highly pressured situation (negative behavioural indicator of 'Expressing and Managing own Emotions') and less likely to experience a positive impact, or remember, a manager who keeps calm and appears in control of the situation (positive example of the same competency). This is in contrast with the majority type of competency where positive behaviour is more impact-making and memorable. For example, a manager who provides employees with an opportunity to air their views (positive behavioural indicator for 'Participative approach') is more likely to have a positive impact and be remembered, whereas a manager who doesn't ask for staff views (negative behavioural indicators of the same competency) may have less negative impact and be less likely to be remembered.

- When examining positive and negative indicators referred to by managers and employees, further differences are revealed. Although, in general, similar numbers of managers and employees referred to positive examples of each competency (for instance 61% of employees and 64% of managers interviewed referred to positive indicators of 'Managing workload and resources' as examples of effective stress management behaviour), when examining percentage frequency of positive and negative behaviours, there is a wide discrepancy. The percentage frequency of mentions of positive indicators was much higher for managers than employees on each competency. Conversely, employees mentioned many more negative indicators of each competency than managers. This is consistent with research by Dasborough (2006) who found that employees were more likely to recall negative events than positive ones, relating this to Affective Events Theory (AET).

- Workshops for Human Resource, Health and Safety and Occupational Health professionals have been run to promulgate and test reactions to the approach. Reactions to the approach have been overwhelmingly positive, with all workshops having waiting lists far exceeding the total delegate allowance. At the workshops, in which a draft version of the 'Management Competencies for Preventing and Reducing Stress at Work' Framework was presented, delegates gave their reactions to the framework. Reactions were that delegates felt the competencies included in the framework clearly overlapped with existing 'good' management behaviours and therefore would be possible to integrate into their particular people management practices. Other comments were that the framework was more current, had more specificity and more humanity than the comparison general management framework (Great 8), and that the use of behavioural indicators was a way to engage managers as it seemed more specific and 'real' than the majority of complex or static frameworks that delegates were currently using. Furthermore, delegates noted that the approach – talking about stress management in the context of people management – offered an opportunity for Human Resource and Occupational Health/ Health and Safety professionals to meet on common ground therefore overcoming the barriers of some traditional stress management approaches.

4.2 MAPPING ONTO THE HSE MANAGEMENT STANDARDS

The research aimed to identify those behaviours that are associated with each of the six HSE Management Standards and those behaviours that are associated with the implementation of the Management Standards. Behavioural competencies were mapped against the Management Standards using the approach described in section 2.6.

- There was high agreement between the researchers' mapping, the mapping generated by employees and managers in the written exercise, and by HR professionals in the workshop exercise indicating a degree of consensus about those behaviours relevant for each of the Management Standards.

- Four competencies identified in the research appeared to sit outside of the six Management Standard areas. These were 'Knowledge of Job' (referring to a line manager's understanding of the task his/her team performs), 'Taking Responsibility' (referring to leading from the front, taking a hands-on approach), 'Empathy' (seeing employees as individuals, with personal lives, stress levels and needs) and 'Seeking Advice' (from occupational health, HR and other managers). Further research would need to be undertaken to see whether these competencies are associated with any of the six Standards or represent behaviours that underlie all of the Management Standards i.e. reflect a general managerial style and whether they represent one or more different and discrete areas.

- Certain competencies mapped across more than one Management Standard area reflecting a degree of overlap in management behaviour. For example behavioural indicators of 'Individual Consideration' were mapped (by employees' and managers' written exercises and by HR workshop exercises) onto 'Demands', 'Support', 'Relationships' and 'Role'. It may be, therefore, that individual competencies have an impact on more than one HSE Management Standard area.

- The 'Development' competency was variously mapped onto the standards of 'Control', 'Support' and 'Role'. Researchers mapped this onto 'Control' as a result of the wording of the Standard, which included the statements 'employees are encouraged to develop new skills to help them undertake new and challenging pieces of work' and 'the organisation encourages employees to develop their skills'. Although 'Development' is an important area, it does not seem to be seen by employees, managers or HR professionals as a 'Control' issue; instead the written and workshop exercise data shows that 'Development' was mapped not onto 'Control' but onto 'Support' and 'Role'.

4.3 MAPPING ONTO OTHER MANAGEMENT FRAMEWORKS

A final aim of the research was to explore the possible integration of the 'Management Competencies for Preventing and Reducing Stress at Work' Framework into existing management competency frameworks. To achieve this, the emergent Framework was mapped onto five general management frameworks (using the LBDQ, Great 8, TLQ public, TLQ private and MLQ 5X), five sector specific frameworks (one of for each of Finance, Education, Local Government, Central Government and Healthcare), and three National Frameworks (using the Management Standards Framework, Investors in People and DTI Inspirational Leadership). For full results, please refer to section 3.10 of the Results chapter.

- Mapping the 'Management Competencies for Preventing and Reducing Stress at Work' framework onto other management frameworks revealed some important parallels between this and other frameworks that specify what managers are expected to do. The comparison with the general management frameworks (using the LBDQ, Great 8, TLQ public, TLQ private and MLQ 5X) and the sector specific frameworks both revealed a similar picture. All competencies were included in at least one of the frameworks, but no framework covered all the competencies. Three of the competencies appeared in all ten comparison frameworks ('Participative approach', 'Acting with Integrity' and 'Communication').

- Taking dichotomies used in theoretical underpinning of the LBDQ (task-based versus relationship-based behaviour) and the MLQ and the TLQ (transformational versus transactional behaviour), it is interesting that the five competencies that appeared in all of the frameworks describe transformational and relationship-based behaviours rather than task-based and transactional behaviours. That said, it can be seen that the 'Management Competencies for Preventing and Reducing Stress at Work' Framework contains examples of behaviours of all four types; transactional, transformational, task-based and relationship-based; whilst not fitting exclusively, or even in the main, into one model in particular.

- Mapping onto National Frameworks (using the Management Standards Framework, Investors in People and the DTI Inspirational Leadership framework) revealed a more mixed picture. The Investors in People and Management Standards Framework only included nine and ten of the 19 Management Competencies for Preventing and Reducing Stress respectively. A reason for the appearance of a lack of fit with their model was given by Investors in People (IIP) who explained that although two indicators within the IIP standard refer to the definition and application of management knowledge, skills and behaviours, they are more general in nature than specific. However, IIP assessors would probably cover more of the 'Management Competencies for Preventing and Reducing Stress at Work' framework than is apparent from the IIP framework as they would be looking for specific evidence towards the general assessment outcomes. It was felt by IIP therefore that although 'Managing Workload and Resources', 'Dealing with work problems', 'Accessible/Visible' and 'Managing Conflict' were not explicitly set out within the standard, they would be within the scope of evidence an assessor would look for.

- The DTI Inspirational Leadership framework was a much closer fit to the 'Management Competencies for Preventing and Reducing Stress at Work' framework than the other two national frameworks, including all but five of the competencies ('Health and Safety', 'Knowledge of Job', 'Taking Responsibility', 'Managing Conflict' and 'Seeking Advice'). With the exception of 'Taking Responsibility', these were the competencies that were least mentioned by the sample in the current research.

- Across the majority of frameworks, there does appear to be a large overlap between the general management behaviours that managers are expected to demonstrate, and the stress management behaviours identified in this research. This reinforces the importance and relevance of the competency framework approach adopted in this research study, firstly by demonstrating that integration of the competency framework into existing people management frameworks is a real possibility, and secondly by allowing the identification of gaps in frameworks that may prove vital for tackling work stress.

4.4 STRENGTHS AND POTENTIAL BIAS IN THE RESEARCH

This section outlines the strengths and potential bias in the research. In doing so, where appropriate, it offers a rationale and steps taken to reduce bias.

- Importantly, this research adopts a behavioural approach to identify the specific manager behaviours required to prevent and reduce work stress and in doing so, draws from a qualitative approach that has been successfully applied to identify other relevant behaviours in alternative settings (Patterson et al., 2000).

- The procedures adopted for the analysis of the qualitative data into a quantitative frequency based structure were stringent and consistent with methods used in a number of published sources (e.g. Dasborough, 2006). Impartial observers blind to the aims of the study were used to elicit themes (Dasborough, 2006). The themes were then reviewed by researchers, consistent with a method used Patterson et al (2000) and a coding structure developed. The inter-rater reliability of the coding and robustness of the coding structure was measured at three separate time points and at each one the level of agreement was found to be acceptable before progressing, consistent with guidelines by Currell et al (1999) and Kerlinger (1964).

- Although qualitative research has been criticised as it does not allow for definitive testing of theory (e.g. Bryman, 2004), the use of the qualitative paradigm was most suitable within this example in order to satisfy the objectives of the research. In understanding the potential subjectivity bias with research of this nature, steps were taken to ensure a rigorous research design (such as undertaking inter-rater reliability testing), in order to limit the possible effects of that bias.

- Whilst use of frequency analysis allowed the analysis of qualitative data into a quantitative frequency based structure, it is acknowledged that when using frequency analysis, a strong assumption cannot be made that any differences in frequency of mentions of each particular competency corresponded to meaningful differences within or between transcripts (King, 1998). In light of this, quantitative research is needed in order to validate the framework, and establish the importance and impact of the emergent manager behaviours on relevant outcomes (such as employee well-being and experience of psychosocial hazards).

- Use of the critical incident technique, although advantageous in many respects such as the revelation of issues that are of critical importance, relies on the accurate and rich recollection of events by the interviewee. It has been suggested (Chell, 1998, pp. 68-70) that the reliance on accuracy of recall of events is a limitation of the technique. In acknowledging this, steps were taken to improve the accuracy of recall by asking interviewees two days before the interview to think about and recall specific incidents.

- The recall, or memorability, of certain behaviours may have influenced the difference between the positive and negative behaviours recalled by managers and employees. For example, it is perhaps understandable that employees might see negative examples of 'Acting with Integrity' as having a greater impact when recalling specific events, resulting in a higher percentage of negative mentions – for instance the situational impact to an employee of a manager not keeping a promise, or divulging confidential information to the team would be greater, and more memorable, than a manager that treated their employees with equality and respect.

- Individual interviews are social situations, hence interviewees may feel that they were expected to comply with social or organisational norms, resulting in a bias of the results (Alvessson, 1996). Conger (1998) found this was particularly relevant to studies of leadership, finding that they were highly prone to presentational bias. When asked about their leaders, Conger (1998) found that employees answered in a socially desirable manner to protect themselves. Research has also demonstrated the impact of Affective Events Theory when using the critical incident technique (Dasborough, 2006) in that employees will tend to recall negative events more than positive ones.

- While the same interview questions were posed to both employees and managers, managers were being asked to give examples of their own effective and ineffective behaviour, whereas employees were asked to give examples of their managers' (i.e. someone else's) effective and ineffective behaviour. It is understandable that managers would be more comfortable talking about their own effective behaviour than their ineffective behaviour – something that wouldn't present an issue in employee interviews. It is a consistent finding in the 'performance appraisal' literature that self ratings of performance tend to be higher (or that people tend to look at their own competence in more positive ways than others) than ratings by other sources (e.g. Mount, 1984, Harris & Schauenbroeck, 1988). Further it has been shown that managers, in particular, tend to rate themselves higher in competence and effectiveness than others who rate them (Alimo-Metcalfe, 1998). The reasons for this posited by literature are many. These include impression management (Conger, 1998), defensiveness in self perception (Holzbach, 1978), inclination to maintain a positive self image and to maintain self esteem (Gioia & Sims, 1985) and differing frames of reference between managers and employees leading to different perceptions of that behaviour (Hauenstein & Foti, 1989).

- The research takes an overall view of employees and managers and, as such, does not account for individual differences. The increasing body of literature on Leader Member Exchange (LMX), as reviewed in section 1.2.5, strongly suggests that high-quality LMX is associated with a lower levels of subordinate strain and that high quality LMX may help to 'buffer' the detrimental impact of other work-related stressors on employee well-being and job performance. Section 3.9 also points to the potential importance of individual differences: for example, one employee may see a manager encouraging their personal development as an alleviatory or preventative stress management behaviour, whilst another may experience it as aggravating or causing stress. Further research is therefore needed to explore the complexity of individual interactions and the extent to which they moderate the impact of managerial behaviour.

5 THE WAY FORWARD

In this section we examine the implications for the following four audiences: Policy Makers, Research, Employers and Line Managers.

5.1 POLICY MAKERS

In terms of policy relating to the HSE Management Standards, the 'Management Competencies for Preventing and Reducing Stress at Work' Framework, and the mapping of the competencies onto the six HSE Management Standard areas, provides a vehicle for encouraging employers to implement the Standards and a mechanism to help them do so. By clarifying the manager behaviours that are important for managing stress, the framework allows the development of interventions to facilitate behaviour change, ensuring managers have the appropriate skills, abilities and behaviours to manage employee stress effectively and implement the HSE Management Standards. Such interventions can be used as a mechanism for tackling specific 'hotspots' such as departments, units and teams where stress is a problem, or for tackling specific psychosocial hazards (Demands, Control, Support, Role, Relationships and Change). More generally, they can be used to ensure that 'systems are in place locally to respond to individual concerns' as specified by the Standards. If an organisation attempts to tackle stress purely by introducing new policy, without embedding appropriate manager behaviour, the effectiveness of the process is likely to be limited.

The research demonstrates that there is considerable overlap between the management competencies for preventing and reducing stress at work, and general management competencies. This suggests that there are opportunities for Government policy to integrate campaigns on good leadership and management with those on Health and Safety to achieve maximum effect.

The mapping of the framework onto other national frameworks (the Management Standards Framework, Investors in People Framework and DTI Inspirational Leadership Framework) highlighted some 'gaps' in these frameworks, particularly around the 'softer skills' such as 'Managing and Expressing Emotion' and 'Managing Conflict'. This suggests that such national frameworks could usefully be reviewed in light of this research, and aim to integrate some of the factors relevant to stress management.

5.2 RESEARCH

In order to progress this research, the next step is to test the validity of the management competencies for preventing and reducing stress at work identified during the current study. This next step should have the two objectives: firstly to test the concurrent validity of the competency framework by determining the cross-sectional associations between the competencies identified and stress-related outcomes; and secondly, to test the predictive validity of the competencies by determining the longitudinal associations between the competencies identified and the management standards and stress-related outcomes over time.

Further research is also needed to explore the interactions between competencies, in order to explore meta-traits and synergies that are relevant to effective stress management. For instance it could be that competencies operate in synergy with each other, an example being that a competency of 'Empathy' may be necessary to mitigate any potential stress risks of 'Development' on an employee.

Further research is required to translate the research findings into practical tools and diagnostics for use in organisations. Drawing from the concurrent and predictive validity studies, there are opportunities to design a psychometrically valid indicator tool that measures the degree to which an individual exhibits the management competencies associated with preventing and reducing stress at work. Opportunities exist for this to be used either as a self-report or an upward feedback measure.

In the longer term, research should be conducted to design and test interventions that develop managers' management competence in the prevention and reduction of stress. This research should aim to: design a series of training interventions that develop managers' competence in preventing and reducing stress at work; and test the effectiveness of these interventions, using a quasi-experimental design with pre- and post-intervention measures of both behaviours and relevant stress-related outcomes.

Opportunities also exist for applying a competency approach to other areas of occupational health. For example, the identification of the specific behaviours required by line managers to support effectively the return to work of employees' following a period of sickness absence.

It is envisaged that the current study should be the first phase of a broader research programme, which will a) validate the competency framework, b) develop a psychometrically valid measure of the relevant behaviours for use in research and practice, and c) design and test training interventions that can be used to developed managers' competence in managing stress in others.

5.3 EMPLOYERS (HEALTH AND SAFETY, OCCUPATIONAL HEALTH AND HUMAN RESOURCES PROFESSIONALS)

The competency framework approach puts stress management and the Management Standards into a language and format that is easily accessible to HR professionals and line managers. It also provides a common language to facilitate collaboration between HR, Health and Safety, and Line Managers.

The key message to employers is that they need to integrate stress management behaviours into the processes they use to define and develop management competence and that they can use the competency framework from this research to do so. The research suggests that, although existing competency frameworks currently used by organisations are likely to include some of the identified stress management behaviours, they are unlikely to include them all. There is therefore a need to explore which of the relevant behaviours a particular employer already includes/covers and which need adding.

Although the relative importance of each competency and the interactions between competencies still need elucidating, the 'Management Competencies for Preventing and Reducing Stress at Work' framework can already be used to integrate stress management into existing people management practices. Firstly, training and development interventions can be designed using the framework. These can be used to ensure managers develop the appropriate skills, abilities and behaviours to manage stress effectively. Secondly, the framework can be used to guide selection and assessment interventions. These are a means of ensuring that those chosen to be managers show the relevant behaviours, skills and abilities. Thirdly, using competencies provides a mechanism for integrating stress management into performance management. The competencies provide clear specification of what is expected of managers: managers can therefore be rewarded and held accountable for showing the relevant behaviours. In organisations where managers are selected, developed and rewarded for showing competence in managing stress in their employees, the relevant behaviours should become the norm, which should result in enhanced well-being for employees.

In addition to using the 'Management Competencies for Preventing and Reducing Stress at Work' framework to integrate stress management into existing HR and people management practices, the competencies can also be used to complement other stress management activities. As mentioned above, it can provide a mechanism for tackling specific 'hotspots' such as departments, units and teams where stress is a problem or for tackling specific psychosocial hazards (Demands, Control, Support, Role, Relationships and Change) and help ensure that 'systems are in place locally to respond to individual concerns'.

Above all, the framework will enable employers to support managers better. Managers are expected to do a very complex role, often (in the experience of this research project) with little support or training. By using the competency framework approach, employers will be supporting managers to be effective stress managers in terms of being able to prevent, identify and tackle stress in their teams – without actually increasing the workload and therefore the stress upon the line manager him-/herself.

5.4 LINE MANAGERS

A key message to Line Managers is that effective stress management does not have to be a separate activity: stress management is a part of normal general management activities. It is about the way managers behave on a day-to-day basis towards those that they manage.

There is not one key behaviour needed to be an effective stress manager, therefore managers will be required to think about using a complementary set of behaviours. These behaviours are likely to differ in importance depending on the situation and the individual employees concerned.

Through providing managers with a clear specification of those behaviours required to manage staff in a way that prevents and reduces stress at work, managers can learn to apply them in their own work area. Some of these behaviours are probably things that many managers already do, others may need to be added to their management approach. Managers can use this framework to get feedback on the extent to which they are behaving in the ways that are consistent with the prevention and reduction of stress at work. Furthermore if managers recognise gaps in skills or behaviours that are difficult for them in particular, training and development could be requested.

For managers that are involved in other stress management activities, such as risk assessments or stress auditing, this framework can provide a useful starting point from which to approach a solution. For example, if the risk assessment identified that a team reported low levels of 'Control', managers could use the framework to reflect upon how they might be able to increase the perceptions of control in their employees by the way that they manage.

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7. APPENDICES

1.0 Scales of Supervisory Behaviours

a) Offerman and Hellman (1996)

Survey of Management Practices questionnaire which contains the following 11 leader behaviour scales:

- Clarification of goals and objectives
- Upward communications and participation
- Orderly work planning
- Expertise
- Work facilitation
- Feedback
- Recognition for good performance
- Time emphasis
- Control of details
- Goal pressure
- Delegation

b) van Dierendonck et al (2004)

The leader behaviour measure was comprised of nine behavioural subscales which are listed below (the researchers combined these scales and used a total leader behaviour score in their analysis):

- presenting feedback
- coaching/support
- commitment to quality
- communication
- fairness
- integrity and respect
- participation and empowerment
- providing feedback
- valuing diversity

c) **O'Driscoll and Beehr (1994)**

An overall measure of supervisory behaviour that included the following dimensions:

- initiating structure (measured with items from the LBDQ – see Appendix 2.8)
- communication
- goal-setting
- problem-solving
- feedback
- support (including providing resources, arranging help, and facilitating performance)

1.1 HSE states to be achieved for each standard

Demands:

- the organisation provides employees with adequate and achievable demands in relation to the agreed hours of work
- people's skills and abilities are matched to the job demands
- jobs are designed to be within the capabilities of employees, and
- employees' concerns about their work environment are addressed.

Control:
- Where possible, employees should have control over their pace of work
- employees are encouraged to use their skills and initiative to do their work
- where possible, employees are encouraged to develop new skills to help them undertake new and challenging pieces of work
- the organisation encourages employees to develop their skills
- employees have a say over when breaks can be taken, and
- employees are consulted over their work patterns.

Support:
- the organisation has policies and procedures to adequately support employees
- systems are in place to enable and encourage managers to support their staff
- systems are in place to enable and encourage employees to support their colleagues
- employees know what support is available and how and when to access it
- employees know how to access the required resources to do their job, and
- employees receive regular and constructive feedback.

Relationships:
- the organisation promotes positive behaviours at work to avoid conflict and ensure fairness
- employees share information relevant to their work
- the organisation has agreed policies and procedures to prevent or resolve unacceptable behaviour
- systems are in place to enable and encourage managers to deal with unacceptable behaviour, and
- systems are in place to enable and encourage employees to report unacceptable behaviour.

Role:
- the organisation ensures that, as far as possible, the different requirements it places upon employees are compatible
- the organisation provides information to enable employees to understand their role and responsibilities
- the organisation ensures that, as far as possible, the requirements it places upon employees are clear, and
- systems are in place to enable employees to raise concerns about any uncertainties or conflicts they have in their role and responsibilities.

Change:
- the organisation provides employees with timely information to enable them to understand the reasons for proposed changes
- the organisation ensures adequate employee consultation on changes and provides opportunities for employees to influence proposals
- employees are aware of the probable impact of any changes to their jobs. If necessary, employees are given training to support any changes in their jobs,
- employees are aware of timetables for changes
- employees have access to relevant support during changes.

1.2 Mapping of other management behaviours onto each HSE Management Standard Area

Study	*Supervisory behaviour dimensions*	*Example item or scale description (if reported)*	*HSE MS*
Gilbreath & Benson (2004)	Job control	Is flexible about how I accomplish my objectives	CONTROL
	Leadership	Makes me feel like part of something useful, significant, and valuable	OTHER
	Communication	Encourages employees to ask questions	CONTROL CHANGE
	Consideration	Shows appreciation for a job well-done	SUPPORT
	Social support	Steps in when employees need help or support	SUPPORT
	Group maintenance	Fails to properly monitor and manage group dynamics	RELATIONSHIPS
	Organising	Plans work to level out the load, reduce peaks and bottlenecks	DEMANDS
	Looking out for employee well-being	Strikes the proper balance between productivity and employee well-being	SUPPORT
Offermann & Hellmann (1996)	Clarification of goals and objectives		ROLE
	Upward communications and participation		CONTROL
	Orderly work planning		DEMANDS
	Expertise		OTHER
	Work facilitation		SUPPORT
	Feedback		SUPPORT
Offermann & Hellmann (1996) cont.	Recognition for good performance		SUPPORT
	Time emphasis		DEMANDS
	Control of details		DEMANDS CONTROL
	Goal pressure		DEMANDS
	Delegation (may have both positive and negative impact)		CONTROL DEMANDS
	Approachability	Includes ease of talking with	SUPPORT
	Team building	Includes the desire for group members to get along well	SUPPORT RELATIONSHIPS
	Interest in subordinate growth		SUPPORT
	Building trust		SUPPORT RELATIONSHIPS

Study	*Supervisory behaviour dimensions*	*Example item or scale description (if reported)*	*HSE MS*
van Dierendonck et al. (2004)	Presenting feedback	Presents feedback in a helpful manner and with a workable plan for improvement if required	SUPPORT
	Coaching/support	Willingly shared his or her knowledge and expertise with me	SUPPORT
	Commitment to quality	Regularly challenged me to continuously improve my effectiveness	SUPPORT
	Communication	Clearly stated expectations regarding our team's performance	ROLE
	Fairness	Treated me fairly and with respect	RELATIONSHIPS
	Integrity and respect	Followed through on commitments	RELATIONSHIPS
	Participation and empowerment	Allowed me to participate in making decisions that affect me	CONTROL
	Providing feedback	Providing me with timely specific feedback on my performance	SUPPORT
	Valuing diversity	Encouraged and accepted points of view that differed from his or her own	CONTROL RELATIONSHIPS
O'Driscoll & Beehr (1994)	Initiating structure	Clarifies expectations about performance; makes it clear what has to be done and how it should be done; assigns tasks to groups members; sets up standard rules and procedures	ROLE DEMANDS
	Communication		ROLE CHANGE
	Goal-setting		ROLE
	Problem-solving	Helps to solve work-related problems; identifies problems before they become unmanageable	DEMANDS SUPPORT
	Feedback		SUPPORT
	Support	Provides needed resources, arranges help from other people when required, facilitates effective job performance	DEMANDS SUPPORT
Wager et al. (2003)	Interpersonal fairness	Giving timely feedback (particularly offering praise for a job well done); demonstration of trust and respect; consistency and non-partiality in the treatment of staff members; adoption of a flexible approach according to each employee's individual needs	SUPPORT
Beehr et al. (1990), Fenalson & Beehr (1994), Stephens & Long (2000)	Postitive work-related communications	We talk about the good things about our work	SUPPORT
	Non-job communications	We discuss things that are happening in our personal lives	SUPPORT
Stephens & Long (2000)	Communications about disturbing work events	We discuss parts of the job that have been upsetting	SUPPORT

2.0 Full breakdown of each participating organisation and method of recruitment

Healthcare:
100% recruitment by existing contacts of the Researchers including Hounslow PCT, The Royal Free Hospital, The Cardiff and Vale Trust, Central Manchester University Hospital and Northumbria Trust.

Education:
54% recruitment from existing contacts (George Monoux College, Barking Abbey, Napier University and Miscellaneous).
46% recruitment via Worklife Support network (Ribby with Wrea Primary School, Hillside School, Chorley St Marys Primary School, Great Harwood St Barts).

Central Government:
23% recruitment from networking at conference (British Geological Survey)
70% recruitment from HSE and CIPD (West Yorkshire Probation Board, Probation Service, Home Office, DVLNI and Northern Ireland Civil Service).
The Prison Service (6%) was subsequently recruited from a contact provided by a participating organisation.

Local Government:
100% provided by existing contacts including London Borough of Newham, London Borough of Ealing, Sheffield City Council, Transport for London, Oxford City Council, Brighton and Hove LA and the London Fire Brigade.

Finance:
24% recruitment from existing contacts (Bradford and Bingley)
76% recruitment from HSE and CIPD (Prudential, Royal Bank of Scotland, Standard Life and Lloyds TSB).

HR Professionals were recruited in two ways - from those organisations who had agreed to participate in the research (in most cases the key stakeholders were HR or Health and Safety personnel) and through the CIPD. Exact breakdowns of participation in the HR workshops are provided below:

Morning workshop:
21% recruitment from participating organisations
89% recruitment from CIPD

Afternoon workshop:
12% recruitment from participating organisations
88% from CIPD

Due to demand from participating organisations, a third workshop was run specifically aimed at Health and Safety/Occupational Health professionals. For this workshop, professionals were recruited either from those organisations who had agreed to participate in the research, or through the HSE 'Stress solutions' online discussion forum. Exact breakdowns of participation in the workshop is provided below:
33% recruitment from participating organisations
67% recruitment from HSE 'Stress solutions' online discussion forum.

2.1 Examples of recruitment materials (flyers)

Example of short recruitment 'flyer'
Do you have experience of working under pressure?

Would you be interested in sharing your experiences with a team of researchers from Goldsmiths College (University of London), who are trying to identify specific management behaviours that are effective in preventing and reducing work-related stress in Local Government departments?

What's involved?
You will be invited to take part in a short (30-60 minute) interview with a researcher from Goldsmiths College. The interview can be conducted over the phone, or face-to-face. During the interview you will be asked to describe some of the management actions that you have found helpful (and those that you have found less helpful) in managing the pressures and demands on you and your team. The interview will be strictly confidential – no one at <insert organisation> will ever know how you personally responded. Your interview responses will be added to those from a number of other employees working within Local Government, and will be translated into national guidelines for managing work-related stress.

Benefits to staff who participate

- You will have the opportunity to 'take time out' to discuss the pressures that you experience in your daily work.
- You will be provided with summary report outlining the helpful and unhelpful behaviours and competencies identified within your sector in order to make stress management of staff easier and more understandable.
- You will be given a review of the new evidence based management practice in your area, focusing on the strategies to reduce absence and increase staff well-being.

If you are interested in participating in this important project, or if you require further information, please contact Rachel Lewis from Goldsmiths College (email: r.lewis@gold.ac.uk; Tel: 07957 296343).

Example of longer recruitment 'flyer':
The issue of Stress

- 500,000 people in the UK experience work related stress at a level that is making them ill (HSE,2003)
- Workplace stress is a problem that costs UK industry an estimated £9.6bn per year (HSE, 2003; CBI, 1999)

A new approach to Stress at Work
A team of occupational psychologists at Goldsmiths College, with sponsorship from the UK Health and Safety Executive, have launched a major new stress management project linked to the national Management Standards for work-related stress. The HSE recently developed the management standards for stress in order to provide best practice to organisations, the ultimate aim of which being to reduce work-related stress and absenteeism throughout the UK. To read more about the management standards, click the following link:
http://www.hse.gov.uk/stress/standards/index.htm

Putting the Management into Stress Management
Much of the responsibility for implementing these standards will fall on line managers. To support line managers with this, our project aims to identify the skills and competencies that managers will need to implement the approach effectively. By identifying these, managers will be able to integrate stress management into existing competency frameworks, and translate it into day-to-day managing at work.

How you could help
You could play a key part in the process by sharing your experiences with us. We will be interviewing both managers and employees) across the Local Government sector from December 2005 to April 2006. During the interview you will be asked to describe some of the management actions that you have found helpful (and those you have found less helpful) in managing the pressures and demands on you and your colleagues. Each interview will last between 30 minutes and one hour, either face-to-face or by telephone, and will be treated in the strictest confidence.

In return for your participation, you will receive a summary outlining the effective and ineffective stress management behaviours for employees working within Local Government, allowing you to integrate stress management into your working relationships. You will also receive a review of the new evidence based management practices, focusing on strategies for reducing absence and increasing staff well-being.

If you would be prepared to give up half an hour of your time and take part or would like to know more about the project or getting involved, please contact Rachel Lewis at Goldsmiths College on r.lewis@gold.ac.uk or on 07957 296343.

To download a copy of a free HSE guide to reducing stress at work, click below
http://www.hse.gov.uk/pubns/misc686.pdf

2.2 Demographics breakdowns by sector

Percentage gender split of interviews conducted in each sector

Sector	*Male (%)*	*Female (%)*
Financial (n = 78)	33	67
Healthcare (n = 80)	33	67
Education (n = 60)	32	68
Local Government (n = 71)	59	41
Central Government (n = 80)	54	46
Overall (n = 356)	42	58

Percentage size of organisation split of interviews conducted in each sector

Sector	*Size of Organisation*				
	1-49	50-249	250-999	1000-4999	5000+
Local Government (n = 64)	3	27	2	16	53
Central Government (n = 64)	3	20	48	19	9
Education (n = 53)	47	30	2	17	4
Healthcare (n = 74)	4	1	12	11	72
Finance (n = 79)	0	0	4	20	76

Mean demographics by sector

Sector	*Mean Team Size*	*Mean no. of Direct Reports*	*Mean no. of Yrs in Organisation*	*Mean no. of Yrs in Job*	*Mean no. of Hours worked per week*
Local Government	29.91	7.21	13.02	5.25	39.56
Central Government	22.89	4.43	12.84	5.25	38.88
Education	21.41	4.96	8.67	5.12	43.43
Healthcare	47.51	5.16	9.63	3.59	42.20
Finance	28.53	4.55	12.64	3.33	40.50

2.3 Final manager and employee proformas

Interview Proforma: Employee Interview

Firstly I would like to thank you for agreeing to take part in this research project. I expect our time today to last for about half an hour – is that OK with you?

I work in a research team at Goldsmiths College, University of London. We are conducting interviews with a large number of employees within the <insert sector> sector, in order to identify the specific behaviours that managers have found effective in managing stress in their teams. Although it is widely recognised that stress can be a problem in your area of work, there is little information available to help managers know what they should and shouldn't be doing when it comes to managing stress.

I'm going to record everything that we discuss today, but it is important to know that anything you say will be strictly confidential. We aren't reporting on any individual responses and no one at your organisation will ever know how you personally responded. Do you have any concerns about confidentiality or the project at the moment? If anything crops up during or after the interview that you'd like to discuss or that you have a question about, please do feel free to call me.

Before I begin the interview, I just need to ask you a few demographic questions for my records.

<Give the demographics sheet >

Q1. How would you define work-related stress?

That sounds very similar to the Health and Safety Executive definition of stress as the adverse reaction people have to excessive pressures or other types of demand on them. Pressure in itself isn't necessarily a problem – in fact it can be motivating. It is only a problem when it becomes excessive or goes on for too long.

Q2. What would you say are the main day-to-day sources of pressure and demands on you and your team?

Q3. Can you tell me about a time that your manager has helped to manage the demands and pressures on you and your team members?

Probes:
[Let them describe generally for a bit and then]……can you think of a specific incident?
What exactly did he/she do?
How did you respond to this?
Why do you think your manager's actions helped to manage the pressure?
How long ago did this happen?

Q4. Can you tell me about a time when your manager's action has been less effective in managing the pressure and demands on you or other team members?

Probes:
What exactly did he/she do?
How did you react to this?
Why do you think your manager's behaviour was ineffective in this situation?
How long ago did this happen?
What could your manager have done that would have been more effective in that situation?

Q5. Have you ever felt that something your manager did or didn't do was the cause of stress in your team? Probes:
What exactly did your manager do?
How long ago did this happen?
What was the impact on you/your team?
What could your manager have done that would have prevented you/your team from becoming stressed in that situation?

Q6. On a more positive note, what else does your manager do to ensure that you and your team are happy and healthy?

Probes:
Can you give me an example of what your manager actually does?
Does this work with all of your team members? If not, please discuss further.
How does this lead to a healthy team?

Thank you very much for taking the time to participate in this study. Your examples will be very helpful indeed. Do you have any questions at this point?
In terms of next steps, just so that you know what is going to happen to all of this information – we will be collecting experiences, such as yours, from 200 managers and 200 other employees, we will then draw out those actions that have been reported to be effective – and those that are ineffective- to provide guidance to managers. If you'd be interested, we will send you a summary report of our findings specifically focused on your sector. If any other questions come to mind at a later date and you want to talk about your contribution or the research project in general then please do contact me.

Interview Proforma: Manager Interview

Firstly I would like to thank you for agreeing to take part in this research project. I expect our time today to last for about half an hour – is that OK with you?

I work in a research team at Goldsmiths College, University of London. We are conducting interviews with a large number of managers within the <insert sector> sector, in order to identify the specific behaviours that managers have found effective in managing stress in their teams. Although it is widely recognised that stress can be a problem in your area of work, there is little information available to help managers know what they should and shouldn't be doing when it comes to managing stress.

I'm going to record everything that we discuss today, but it is important to know that anything you say will be strictly confidential. We aren't reporting on any individual responses and non one at your organisation will ever know how you personally responded. Do you have any concerns about confidentiality or the project at the moment? If anything crops up during or after the interview that you'd like to discuss or that you have a question about, please do feel free to call me.

Before I begin the interview, I just need to ask you a few demographic questions for my records.

<Give the demographics sheet >

Q1. Can I start by asking you how you would you define work-related stress?

That sounds very similar to the Health and Safety Executive definition of stress as the adverse reaction people have to excessive pressures or other types of demand on them. Pressure in itself isn't necessarily a problem – in fact it can be motivating for many people. It is only a problem when it becomes excessive or goes on for too long.

Q2. What would you say are the main day-to-day sources of pressure and demands on you and your team?

Q3. Can you tell me about a time when as manager, you have been effective in managing the demands and pressures on one of your team or on your team members?

Probes:
[Let them describe generally for a bit and then] can you think of a specific incident?
What exactly did you do?
Why did you decide to take this course of action?
How did the team member/team respond to this?
How did you know that your action was effective?
Why do you think this action was effective in managing the pressure?
How long ago was it that this happened?

Q4. Can you now tell me about a time when your action as a manager has been less effective in managing the pressure and demands on one or more of your team members?

Probes:
What exactly did you do?
How did you know that your action was less effective in managing the pressure on your team/team member?
How did the team member/s respond to this?
Why do you think this action was less effective?
How long ago was it that this happened?
What would you do differently in that situation again?
Were there any barriers to you taking more effective action in this situation?

Q5. Have you ever felt that something you have done, or even haven't done, has been the cause of stress in your team?

Probes:
What exactly did you do or not do?
What was the impact on your team member/s?
How long ago was it that this happened?
What were the barriers to you acting differently in this situation?

Q6. On a more positive note, are there any other things that you do as a manager to ensure a happy and healthy work team?

Probes:
Can you give me an example of what you actually do.
Does this work with all of your team members? If not, please discuss further.
Why does this type of action lead to a healthy team?
What helps you to do this?

Q7. Thank you so much for your excellent examples – they will be very helpful. Finally, what do you think has helped you to improve your management of the pressures and demands on your team? Probes:

Have you had any training and development in how to manage pressure and stress?
What else do you find useful to manage the pressure and stress?
Do you have any on-going support or training in stress management?
What do you think would be useful in the future?

Thank you very much for taking the time to participate in this study. Do you have any questions at this point?

If any other questions come to mind at a later date and you want to talk about your contribution or the research project in general then please do contact me. In terms of next steps, just so that you know what is going to happen to all of this information – we will be collecting experiences, such as yours, from 200 other managers and 200 employees, we will then draw out those actions that have been reported to be effective – and those that are ineffective - to provide guidance to managers. If you'd be interested, we will send you a summary report of our findings specifically focused on your sector.

2.4 Demographics sheet

Name: …… Date: ……
Age: …… Gender: M / F
Name of Organisation: …….....

D1 Please indicate your ethnic background

White	☐	Black Caribbean	☐
Black African	☐	Black Other	☐
Indian	☐	Pakistani	☐
Bangladeshi	☐	Chinese	☐
Mixed ethnic background	☐	Other (please specify)	☐

D2 How many employees does the organisation you work for have? (please select one only)

1-49	☐	50-249	☐
250-999	☐	1000-4999	☐
5000+	☐		

D3 How many employees does your team have? ……..

D4 If you are a manager, how many direct reports do you have? ……

D5 Please describe your job role.

……
……

D6 How long have your worked in the organisation and in your current job? (to the nearest month)

Organisation: …… Years…….Months
Current Job: ……. Years…….Months

D7 How many hours do you actually work in a typical week? ……

D8 Are you aware of any stress management/workplace well-being initiatives in your organisation? If yes, please explain.

……
……..

D9 Are you aware of the Health and Safety Executive's (HSE's) Management Standards approach to work related stress?

Yes ☐ No ☐

D10 If yes, how much experience have you had of implementing this approach in your team? (please circle a number in the scale below), where 1 = No Experience and 5 = A great deal of experience.

1 2 3 4 5

2.5 Employee and Manager Written Exercise

Employee Written Exercise

In this exercise we are aiming to gather specific examples of helpful and unhelpful management actions that relate to six different characteristics of work (as described in the centre column). For instance, under the characteristic of 'Control', a helpful management action could be 'Allows me to decide when to take my lunch hour'. An unhelpful action under 'Change' could be 'Doesn't provide me with enough information to allay my fears about job insecurity'.

Instructions:

- List one specific example of both a helpful and an unhelpful management action under each of the six characteristics of work.
- Try to think about specific actions your manager has taken that have affected your work.

Please note: Only the instructions are included as the table of the written exercise is as per the employee written exercise

Manager Written Example

Example of Helpful Management Action	Work Characteristic	Example of Unhelpful Management Action
	Work Demands: Includes issues like workload, work patterns and the work environment	
	Job Control: How much say you have over the way you do your work	
	Line Management Support: Includes the encouragement, sponsorship and resources provided by line management	
	Working Relationships: Includes promoting positive working to avoid conflict and dealing with unacceptable behaviour	
	Understanding your Job Role: Whether you understand your role within the organisation and whether you have conflicting roles	
	Handling and Communicating Change: How organisational change (large or small) is managed and communicated in the organisation	

In this exercise we are aiming to gather specific examples of the actions you take as a manager that have proved helpful and unhelpful in relation to six different characteristics of work (as described in the centre column). For instance, under the characteristic of 'Control', a helpful action could be 'Giving my team the authority to plan their own working days'. An unhelpful action under 'Change' could be 'Being flippant about changes that will affect the way my team works'.

Instructions:

List one specific example of both a helpful and an unhelpful action you might take as a manager under each of the six characteristics of work.

2.6 Full instructions given to card sorters

Manager Behaviour Card Sort

Many thanks for agreeing to participate in this project.

This card sort exercise is designed to help us categorise manager behaviours into different competencies (or "themes").

The set of cards describes various manager behaviours that were mentioned in research interviews with people from a number of different organisations.

Some of the manager behaviours are positive (i.e., effective) and some are negative (i.e., less effective).

Your task

Your task is to sort the cards into general manager competency themes (i.e., develop piles of the behaviours that you think reflect the same competency). Both positive and negative behaviours can be included in the same piles.

Label each of your competency categories with a post-it note. These labels will probably change over the course of the exercise.

By the end of the exercise, the goal is to have the following:

1) a short title for each competency, and
2) a brief label (one or two sentences) to capture the nature of the competency contained in each pile.

If you come across any behaviours that don't seem to fit with any of your competency themes, it might be helpful to create a separate pile and come back to it later.

Discuss your categories with your fellow sorter - we are interested in how you decide on the different themes.

Feel free to ask any questions.

2.7 Mapping for each General Management Framework

Management Competency Framework 1: Great 8 Competency Framework

Great 8 Framework	*SMC Mapping*
Leading and Deciding (takes control and exercises leadership. Initiates action, gives direction, takes responsibility)	Taking Responsibility Dealing with work problems
Supporting and Cooperating (supports others, shows respect and positive regard. Puts people first, works effectively with individuals and teams. Behave consistently with clear values)	Empathy Friendly Style Acting with Integrity Individual Consideration
Interacting and Presenting (communicates and networks effectively. Persuades and influences others. Relates to others in a confident manner)	Communication
Analysing and Reporting (evidence of clear analytical thinking, gets to the heart of complex issues, applies own expertise, acquire skills for new technology. Good written communication)	Dealing with work problems
Creating and Conceptualising (open to new ideas and experiences, seeks out learning opportunities, handles situations with innovation and creativity, thinks broadly and strategically, supports and drives organisational change)	Participative approach
Organising and Executing (Plans ahead and works in a systematic and organised way. Follows directions and procedures. Focuses on customer satisfaction and delivers a quality service)	Managing workload and resources Process Planning and Organisation
Adapting and Coping (adapts and responds well to change, manages pressure effectively and copes well with setbacks)	Expressing and managing emotions
Enterprising and Performing (focus on results and achieving personal work objectives. Works best when related closely to results and impact of personal efforts is obvious. Understanding of business, commerce and finance. Seeks opportunities for self development)	

SMC Competencies outside of Great 8 Framework:

Empowerment, Development, Accessible/Visible, Health and Safety, Feedback, Managing Conflict, Knowledge of Job.

Management Competency Framework 2: TLQ (Public Sector Scale)

TLQ Framework	*SMC Mapping*
Leading and Developing Others:	
Showing Genuine concern for others well-being and development (genuine interest in staff as individuals, values contributions, develops strengths, coaches, mentors, positive expectations)	Development
	Individual Consideration
	Empathy
	Participative Approach
Empowers, delegates, develops potential (trusts staff to take decisions/initiatives on important matters, delegates effectively, develops staffs potential)	Empowerment
	Development
	Managing workload and resources
Accessible, approachable, in-touch (approachable and not status conscious, prefers face-to-face communication, keeps in touch)	Accessible/visible
	Friendly style
Encouraging questioning and critical and strategic thinking (encourages questioning traditional approaches, new approaches to problems, strategic thinking)	Participative approach Dealing with work problems
Personal Qualities:	
Transparency, honesty and consistency (honest and consistent, more concerned with the good of the organisation than personal ambition)	Acting with Integrity
Integrity and openness to ideas and advice (open to criticism and disagreement, consults and involves others in decision making, regards values as integral to the organisation)	Acting with Integrity Participative approach
Decisive, risk taking (decisive when required, prepared to take difficult decisions, and risks when appropriate)	Taking responsibility
Inspirational; in touch (Inspirational; exceptional communicator; inspires others to join them)	Communication
Analytical & creative thinker (Capacity to deal with a wide range of complex issues; creative in problem-solving)	Dealing with work problems
Leading the Organisation:	
Inspirational communicator, networker & achiever (Inspiring communicator of the vision of the organisation/service to a wide network of internal and external stakeholders; gains the confidence and support of various groups through sensitivity to needs, and by achieving organisational goals)	Communication
Clarifies individual and team direction, priorities & purpose (clarifies objectives and boundaries; team-oriented to problem-solving and decision-making and to identifying values)	Communication
	Participative approach
Unites through a joint vision (Has a clear vision, and strategic direction, in which s/he engages various internal and external stakeholders in developing; draws others together in achieving the vision)	Participative approach
Creates a supportive learning and self-development environment (supportive when mistakes are made; encourages critical feedback of him/herself and the service provided)	Development
Manages change sensitively and skilfully (Sensitivity to the impact of change on different parts of the organisation; maintains a balance between change and stability)	

SMC Competencies outside of TLQ (Public) Framework:

Process Planning and organisation, Health and Safety, Feedback, Managing Conflict, Expressing and Managing Emotions, Knowledge of Job.

Management Competency Framework 2: TLQ (Private Sector Scale)

TLQ Framework	*SMC Mapping*
Leading and Developing Others:	
Showing Genuine concern (genuine interest in staff as individuals, values contributions, develops strengths, coaches, mentors, positive expectations)	Development
	Individual Consideration
	Empathy
	Participative approach
Enabling (good at developing potential, empowers, supports projects without interfering, balances needs of individuals and organisation	Empowerment
	Development
Being accessible (able to discuss personal issues, approachable)	Friendly style
	Accessible/visible
Encouraging change (encourages production of new ideas, encourages staff to challenge process, views criticism as valuable)	Participative approach
Personal Qualities:	
Acting with Integrity (encourages culture of transparency, acts with integrity, stands up for own beliefs, sees principles and values as integral)	Acting with integrity
Being entrepreneurial (insightful in dealing with customer needs, prepared to take risks, good judgement)	
Inspiring others	
Resolving complex problems (isolates core issues in complex problems, thinks creatively)	Dealing with work problems
Leading the Organisation:	
Networking (effecting in networking and gaining collaboration, communicates effectively with stakeholders, promotes the organisation to the outside world)	Communication
Focusing effort (establishes clear goals, clarifies roles and responsibilities, enables individuals to see how work relates to whole organisation)	Communication
Building a shared vision (effective in gaining support from a wide range of stakeholders, articulates clear vision, involves others in developing vision)	Participative approach
Facilitating change sensitively (takes a broad managerial perspective, uses knowledge and understanding to determine feasibility)	Knowledge of Job
Creating a culture of development (supportive when mistakes are made, encourages critical feedback)	Development
	Feedback

SMC Competencies outside of TLQ (Private) Framework:

Managing workload and resources, Process Planning and Organisation, Health and Safety, Managing Conflict, Expressing and managing emotions, Taking responsibility.

Management Competency Framework 3: MLQ 5X

MLQ Framework	*SMC Mapping*
Charisma/Inspirational (encourages pride, goes beyond self interest, has employees respect, displays power and confidence, talks of values, models ethical standards, considers the moral/ethical, emphasises the collective mission, talks optimistically, expresses confidence, talks enthusiastically, arouses awareness of important issues)	Communication Acting with Integrity
Intellectual Stimulation (re-examines assumptions, seeks different views, suggests new ways, suggests different angles)	Dealing with work problems Seeking advice Participative approach
Individualised Consideration (individualises attention, focuses your strengths, teaches and coaches, differentiates among us)	Development Empathy Individual Consideration
Contingent Reward (clarifies rewards, assists based on effort, rewards your achievement, recognises your achievement)	Feedback
Management by Exception (focuses on your mistakes, puts out fires, tracks your mistakes, concentrates on failure)	Feedback
Passive/Avoidant (reacts to problems if serious, reacts to failure, if not broke, don't fix it, avoids involvement, absent when needed, avoids deciding, delays responding).	Accessible/Visible Managing conflict Taking responsibility Dealing with work problems

SMC Competencies outside of MLQ 5X Framework:

Managing workload and resources, Process planning and organisation, Empowerment, Health and Safety, Expressing and Managing emotions, Friendly style and Knowledge of Job.

Management Competency Framework 4: LBDQ

LBDQ Framework	*SMC Mapping*
Consideration:	
Is friendly and approachable	Friendly style Accessible/Visible
Does little things to make it pleasant to be a member of the group	Friendly Style
Treats all members as his or her equals	Acting with Integrity
Puts suggestions made by the group into operation	Participative Approach
Gives advance notice of changes	Communication
Looks out for the personal welfare of group members	Individual consideration Empathy Health and Safety
Is willing to make changes	
Refuses to explain his/her actions (-)	
Acts without consulting the group (-)	Participative approach
Keeps to him/herself (-)	Accessible/Visible
Initiating structure:	
Lets group members know what is expected of them	Communication
Encourages use of uniform procedures	
Assigns group members to particular tasks	Managing workload and resources
Schedules work to be done	Managing workload and resources Process planning and organisation
Tries out his or her ideas on the group	Participative approach
Makes his or her own attitudes clear to the group	Communication
Decides what shall be done and how it will be done	Dealing with work problems
Makes sure that his or her part in the group is understood by group members	Communication
Maintains definite standards of performance	
Asks that group members follow standard rules and regulations	

SMC Competencies outside of LBDQ framework:
Empowerment, Development, Feedback, Managing conflict, Expressing and managing emotions, Knowledge of Job and Taking responsibility.

2.8 Mapping for each sector specific framework

1. CENTRAL GOVERNMENT
Management Competency Framework 1: National Probation Service

Living Leadership Key Practices	*SMC Mapping*
Honesty and Integrity: Promote the principles of diversity, fairness and justice, act as drivers of change and live up to the new culture and values, inspire and teach the behaviours we expect to see in others.	Acting with Integrity
Bringing our vision to Life: Create commitment to the vision, make targets and objectives clear and understood, ensure everyone understands their contribution	Communication
Clear, understood and Fair: Establish, model and demonstrate clear standards for all, create a support structure to enable consistent achievement of high standards	Communication
Active performance feedback: Create a culture that values and acts upon feedback, applaud excellence, develop the strength and confidence to tackle poor performance, champion continuous improvement	Feedback Development Dealing with work problems Taking responsibility
Innovative, tested and systematic: Establish clear and consistent processes to meet targets and needs, regularly review our processes to ensure they are fit for purpose, encourage collective innovation to improve the way we work	Process Planning & Org. Participative approach
Development and fulfilment: Communicate that the organisation's success is the product of individual growth, create a learning culture for everyone, strengthen people by giving them the authority to act	Communication Development Empowerment
Pride and commitment to excellence: Recognise a job well done and widely communicate success, notice people doing the right things and celebrate it, strengthen the link between effort and outcome to maximise the motivational impact, develop and experiment with innovative new approaches to reward and recognition, have a range of recognition and reward systems.	Feedback

Please list those SMC Competencies that do not fit within the Living Leadership framework:
Managing workload and resources, Accessible/Visible, Managing Conflict, Knowledge of Job, Seeking Advice, Health and Safety, Individual Consideration, Expressing & managing emotion, Friendly style and Empathy.

2. LOCAL GOVERNMENT
Management Competency Framework 2: Sheffield City Council

Sheffield City Council Framework	*SMC Mapping*
Collaborative working: Develop alliances and work effectively with partners, stakeholders and collaborators to resolve problems, implement policies, achieve mutually beneficial goals and improve services	Participative approach Seeking advice Dealing with work problems
Communication: Receive (listen), understand and interpret information from others. Deliver messages, ideas and information and arguments in a manner which promotes understanding of various audiences	Participative approach Communication
Customer Focus: Continuous development and improvement of services to the people of Sheffield (users and non users) by seeking opinions and pursuing value for money and quality in service delivery	Development Feedback Participative approach
Leadership and People Management: Take personal responsibility for ensuring the organisation achieves its strategic plans and objectives by promoting an appropriate culture, empowering others and demonstrating high standards	Empowerment Taking responsibility
People skills: The skills and behaviours underpinning the relationships between self and others, including colleagues, service users, members and other stakeholders	Acting with integrity Taking responsibility Individual Consideration
Process Management: Manage the authority's systems and processes to support the achievement of its policies to improve performance and ensure best value for service users and stakeholders	Process Planning & Org.
Project Management: Apply a methodical and systematic approach in order to achieve successful outcomes in defined areas of activity	Process Planning & Org.
Strategic planning and implementation: Develop the organisations mission and vision to benefit and reflect the needs and aspirations of stakeholders, gain support for them and ensure they are implemented through achievable, planned programmes of action	Process Planning & Org.
Workforce, finance and resource management: Manage effectively and efficiently all workforce, financial and physical resources to fulfil the organisation's objectives	Managing workload & Res.

Please list those SMC Competencies that do not fit within the Sheffield City Council Framework:

Accessible/Visible, Managing Conflict, Knowledge of Job, Health & Safety, Expressing & Managing Emotions, Friendly style and Empathy.

3. HEALTHCARE

Management Competency Framework 3: NHS KSF (Core dimensions using Level 3 – management level)

KSF Framework	*SMC Mapping*
Communication: Develop and maintain communication with people about difficult matters and/or in difficult situations	Communication Managing conflict
Personal and People Development: Develop oneself and contribute to the development of others	Development Taking Responsibility
Health, safety and security: Promote, monitor and maintain best practice in health, safety and security	Health and Safety
Service improvement: Appraise, interpret and apply suggestions, recommendations and directives to improve services	Process planning & Org Participative Approach
Quality: Contribute to improving quality	
Equality and diversity: Promote equality and value diversity	Acting with integrity

Please list those SMC Competencies that do not fit within the KSF Framework:
Managing workload & resources, Dealing with work problems, Accessible/Visible, Feedback, Knowledge of Job, Seeking advice, Empowerment, Individual Consideration, Expressing & Managing Emotions, Friendly style and Empathy.

4. FINANCIAL

Management Competency Framework 4: Financial Ombudsmen Service

Framework	*SMC Mapping*
Working Relationships: Valuing and respecting colleagues, sharing and learning, team management	Acting with Integrity
Leadership: Providing direction, acting as a role model, inspirational leadership, external representation, acting as figurehead	Taking responsibility
Customer Orientation: Customer care, building productive relationships with external organisations	
Communication: Clear communication, concise and persuasive communication, negotiation, presenting to large groups	Communication
Analytical abilities/managing complexity: Dealing with volumes of information, managing complexity, strategic orientation, seeing the bigger picture	Managing workload & Res. Process Planning & Org.
Decision making/exercising judgement: Makes decisions with clear guidelines and knows when to refer to others, more complex decisions, application of personal judgement without precedent	Participative approach Seeking advice Dealing with work problems
Building Expertise/Knowledge: Willing to learn systems and practices, applies learning, divisional awareness, organisational awareness.	Knowledge of Job
Planning and Organisation: Working in an orderly fashion, planning and prioritising, managing resources	Process Planning & Org. Managing workload & Res.
Adaptability/Change Orientation: Accepts and welcomes new ways of working, adapts working practices to demands of situation, suggests innovative approaches, thinking 'outside the box'	Participative Approach
Resilience: Stability under pressure, can deal with conflict and tough demands	Expressing & M. emotions Managing conflict
Results Orientation/Drive: Works effectively to meet set goals, can set own goals, acts with urgency, setting goals for team	Development
Commitment: Caring about, having a genuine interest in, the role, a belief in the work, the organisation and its values	

Please list those SMC Competencies that do not fit within the Financial Framework:

Feedback, Empowerment, Health and Safety, Individual Consideration, Friendly Style and Empathy.

5. EDUCATION

Management Competency Framework 5: Scottish Standard for Headship

Framework	*SMC Mapping*
Professional Actions	
Leading and managing learning and teaching: Promote an ethos of care, achievement, respect and inclusion, a safe, efficient & effective learning environment, culture of challenge and support. Demonstrate and articulate high expectation and set targets for pupils, develop systems for managing learning and teaching	
Leading and developing people: Build alliances, treat people fairly, maintain a positive culture. Develop support of staff and develop and maintain strategies for induction, review and development of staff. Ensure individual accountabilities are well defined, take action when performance is unsatisfactory. Consult,delegate, empower, recognise and appreciate variety of talents and approaches. Manage own workload and support others to ensure an appropriate Work life balance	Acting with integrity Individual Consideration Friendly Style Development Communication Empowerment Empathy
Leading improvement: Establish innovative approaches, take a strategic role in use of new technologies	Participative approach
Using resources effectively: Monitor and evaluate use of resources, including staff	Managing workload & Res.
Building community: Develop and maintain positive and professional relationships with all those associated with school community. Creating a culture of respect	Acting with integrity
Strategic vision, values and commitments	
Vision and standards: Ensure the school vision is clearly articulated, shared, understood and implemented	Communication
Integrity and ethical practice: Promote equality, social justice and inclusion.	Acting with integrity
Democratic values: Set expectations of high levels of respect for self and others, ensure a focus on duties and responsibilities of citizenship	Acting with integrity
Learning for Life: Promote creativity and ambition in pupils	
Knowledge and understanding	
Learning and Teaching: Knowledge and understanding of relevant educational research	Knowledge of Job
Education policy, schools and schooling: Good knowledge of local, national and global priorities	Knowledge of Job
Social and environmental trends and developments: Remain aware of social trends and changes as they impact on education	Knowledge of Job
Leadership and management: Good knowledge and understanding of self evaluation and improvement strategies	Knowledge of Job
Personal and Interpersonal Skills	
Demonstrating self awareness and inspiring and motivating others: Display self awareness, manage self effectively, confront difficult issues and deal positively with criticism, assertive and calm in a crisis and defuse potential problems	Managing Conflict Taking responsibility Expressing & M. Emotion Dealing with work problems
Judging wisely and deciding appropriately: Use effective decision making processes and problem solving techniques, analyse risks and problems, think strategically and remain flexible and open to new ideas.	Dealing with work problems Participative approach
Communicating effectively: Listen well and invite feedback, provide good information in a timely manner	Feedback
Showing political insight: Understand issues relating to power and influence, are of own use of power and personal biases	

Please list those SMC Competencies that do not fit within the Framework:
Process planning & organisation, seeking advice and Health and Safety.

2.9 Mapping for each national framework

Management Competency Framework 1: Chartered Management: Managements Standards Centre

Chartered Management Key Practices	*SMC Mapping*
Managing self and personal skills: Manage your own resources and professional development, develop personal networks	
Providing Direction: Develop and implement organisational plans for your area, map environment, put strategic plan into action, provide leadership for team, area of responsibility and organisation. Ensure compliance with legal, regulatory, ethical, social requirements. Develop culture of organisation. Manage risk. Promote equality of opportunity and diversity in your area and in organisation	Process Planning & Org. Taking Responsibility Acting with Integrity
Facilitating change: Encourage innovation in team, area and organisation. Lead change, plan change and implement change.	Participative approach
Working with people: Develop productive relationships with colleagues and stakeholders. Recruit, select and keep colleagues. Plan workforce. Allocate and check work, monitor progress, provide learning opportunities.	Managing workload & res. Development
Using resources: Manage a budget and finance for area. Promote use of technology, ensure reduced risk of health and safety for you, team and organisation	Health & Safety
Achieving results: Manage a project and its processes, develop and review marketing framework, resolve problems, support problems, work to improve service, build organisational understanding of market and improve performance.	Process Planning & Org. Dealing with work problems Knowledge of Job Communication

Please list those SMC Competencies that do not fit within the Chartered Management framework:
Accessible/Visible, Seeking Advice, Feedback, Empowerment, Managing Conflict, Individual Consideration, Expressing & managing emotion, Friendly style and Empathy.

Management Competency Framework 2: IIP Framework (use management behaviours)

IIP Framework	*SMC Mapping*
Developing strategies to improve the performance of the organisation	
A strategy for improving the performance of the organisation is clearly defined and understood: Managers describe how they involve people when developing plan and agreeing team objectives.	Communication Participative
Learning and development is planned to achieve the organisation's objectives: Managers explain team learning and development needs, activities planned to meet them, how they link to achieving objectives	Development
Strategies for managing people are designed to promote equality of opportunity in the development of the organisation's people: Managers recognise the different needs of people and can describe how they make sure everyone has appropriate and fair access to the support they need. There is equality of opportunity to learn and develop.	Empathy Individual Cons. Acting w Integrity
The capabilities managers need to learn, manage and develop people effectively are clearly defined and understood: Managers can describe the knowledge, skills and behaviours they need to lead, manage and develop people effectively	
Taking action to improve the performance of the organisation	
Managers are effective in leading, managing and developing people: Managers can explain this, give examples of how they give people constructive feedback on their performance when appropriate	Feedback
People's contribution to the organisation is recognised and valued: Managers give examples of how recognise and value individual's contribution	Feedback
People are encouraged to take ownership and responsibility by being involved in decision making: Managers encourage people to be involved in decision making, both individually. Managers promote a sense of ownership and responsibility	Empowerment
People learn and develop effectively: Managers ensure learning and development needs are met	Development
Evaluating the impact on the performance of the organisation	
Investment in people improves the performance of the organisation: Managers give examples of how learning and development has improved the performance of their team and the organisation	Development
Improvements are continually made to the way people are managed and developed: Managers give examples of this	Process Planning & Organisation

Please list those SMC Competencies that do not fit within the IIP Framework:

Managing Workload and resources, Dealing with work problems, Friendly style, Accessible/Visible, Managing Conflict, Knowledge of Job, Taking Responsibility, Seeking advice, Health & Safety and Expressing and Managing emotions.

Management Competency Framework 3: DTI Inspirational Leadership

DTI Framework	*SMC Mapping*
Creating the future: Ability to demonstrate and communicate shared vision, capacity to focus on long term possibilities and share these. Ability to tell stories, seize market opportunities, clear and focused about purpose of organisation, recognise the things that need to be done to build a sustainable company.	Communication Process Planning & Org
Enthusing, growing and appreciating others: Value and enjoy working with people who bring different strengths, adept at building relationships with others in 1-2-1, group and team situations. Good listeners, stimulating, fun, accessible, confident, humble and prepared to be vulnerable. Trust others with responsibility, delegate appropriately and celebrate growth and success of others.	Empathy Individual Consideration Participative approach Accessible/Visible Friendly Style Empowerment Managing Workload & Res Development Feedback Expressing & M Emotion
Clarifying values: People of honesty and integrity who articulate clear values and the demonstrate them. Contribute more than they consume and model the values they hold. Treat colleagues with dignity and respect, clear about integrity which has to exist between values, goals, structures and behaviour. Inclusive, human and compassionate. Put people and principles before rules	Acting with integrity
Ideas to action: Capacity to think laterally, love innovation, take calculated risks, find new ways of solving problems, see and present alternative ways forward. Put complicated concepts into language that others can make sense of, see and set priorities and work towards them with determination. Naturally curious, love learning, very teachable, take time to reflect, know themselves well.	Participative approach Dealing with work problems Communication

Please list those SMC Competencies that do not fit within the DTI Framework:
Managing Conflict, Knowledge of Job, Taking responsibility, Seeking advice and Health and Safety.

3.0 **Mapping of written exercise onto each Management Standard Area**

Appendix 3.0: SMC framework mapped onto HSE Management Standards using mapping from section 3.2 and entries from written exercise

Management competency mapped by researchers	*Management Standard*	*Mapping from Written Exercise*
Managing workload & resources Dealing with work problems Process Planning& Organisation	Demands	Managing workload & resources (47%) Dealing with work problems (9%) Process Planning & Organisation (9%) Participative approach (8%) Individual Consideration (8%) Empowerment (6%) Communication (5%) Other (9%)*
Empowerment Participative approach Development	Control	Empowerment (52%) Participative approach (18%) Managing workload (14%) Dealing with work problems (3%) Process Planning and Organisation (3%) Communication (3%) Other (6%)
Accessible/Visible Health and Safety Feedback Individual Consideration	Support	Development (16%) Feedback (16%) Accessible/Visible (15%) Participative approach (12%) Managing workload and resources (12%) Individual Consideration (10%) Dealing with work problems (7%) Communication (3%) Other (10%)
Managing Conflict Expressing & Managing Emotions Acting with Integrity Friendly Style	Relationships	Participative approach (21%) Managing conflict (17%) Acting with Integrity (11%) Dealing with work problems (9%) Accessible/visible (6%) Communication (6%) Individual Consideration (5%) Expressing & Managing Emotions (5%) Feedback (4%) Friendly Style (3%) Empathy (3%) Other (8%)
Communication	Role	Communication (42%) Development (11%) Participative approach (10%) Managing workload and resources (9%) Empowerment (6%) Individual consideration (6%) Dealing with work problems (3%) Process Planning and organisation (3%) Other (10%)
Communication	Change	Communication (58%) Participative approach (25%) Acting with Integrity (4%) Other (15%)

Knowledge of Job Taking Responsibility Empathy Seeking Advice	Other	n/a

*Where competencies have had a percentage frequency of 2% or less within the Management Standard area, they have been grouped as 'Other'.

3.1 Mapping of HR Written Exercise onto each Management Standard area

Appendix 3.1: SMC framework mapped onto HSE Management Standards using mapping from section 3.2 and entries from HR Exercise

Management competency mapped by researchers	*Management Standard*	*Mapping from Written Exercise*
Managing workload & resources Dealing with work problems Process Planning& Organisation	Demands	Managing workload & resources (55%) Dealing with work problems (14%) Process Planning & Organisation (10%) Communication (10%) Other (10%)
Empowerment Participative approach Development	Control	Empowerment (39%) Participative approach (16%) Managing workload & resources (14%) Process Planning & Organisation (11%) Communication (5%) Taking responsibility (5%) Other (10%)
Accessible/Visible Health and Safety Feedback Individual Consideration	Support	Participative approach (27%) Feedback (11%) Dealing with work problems (10%) Accessible/Visible (8%) Communication (8%) Empathy (8%) Managing workload & resources (6%) Individual Consideration (5%) Acting with Integrity (5%) Other (14%)
Managing Conflict Expressing & Managing Emotions Acting with Integrity Friendly Style	Relationships	Participative approach (19%) Expressing & Managing Emotions (17%) Acting with Integrity (10%) Empowerment (8%) Individual Consideration (8%) Accessible/Visible (6%) Friendly Style (6%) Empathy (6%) Communication (5%) Other (15%)
Communication	Role	Communication (37%) Participative approach (15%) Knowledge of Job (15%) Taking Responsibility (11%) Managing workload & resources (7%) Dealing with work problems (7%) Other (8%)

Communication	Change	Communication (35%) Participative approach (29%) Process Planning & Organisation (18%) Dealing with work problems (12%) Individual consideration (6%)
Knowledge of Job Taking Responsibility Empathy Seeking Advice	Other	Communication (31%) Taking Responsibility (23%) Accessible/Visible (15%) Participative approach (8%) Expressing & Managing emotions (8%) Acting with Integrity (8%) Empathy (8%)

*Where competencies have had a percentage frequency of 5% or less within the Management Standard area, they have been grouped as 'Other'. Note this is higher than in 3.5 due to small sample sizes.

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Management competencies for preventing and reducing stress at work

Identifying and developing the management behaviours necessary to implement the HSE Management Standards

This report presents the findings of the first phase of a research project which aimed to identify the specific management behaviours associated with the effective management of stress at work and to build a management competency framework for preventing and reducing stress at work. The project also aimed to identify those behaviours associated with each of the six HSE Management Standards and those behaviours associated with the implementation of the Standards. A final aim was to explore the possible integration of the emergent competency framework into existing management competency frameworks.

A qualitative, multi-method approach was taken involving 216 employees, 166 line managers and 54 HR practitioners working within the five HSE priority sectors (Education, Finance, Local Government, Central Government and Healthcare). The emergent 'Management Competencies for preventing and reducing stress at work' framework identified 19 competencies relating to the management of stress in employees. These were then compared to the HSE Management Standards and a number of general management frameworks. Conclusions are discussed in light of implications for research, policy makers, employers and line managers.

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