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Using a competency-based approach to identify the management behaviours required to manage workplace stress in nursing: A critical incident study

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ABSTRACT

Aim: To identify the specific management behaviours associated with the effective management of stress in nursing; and to build a stress management competency framework that can be integrated and compared with nurse management frameworks.
Background: Workplace stress is a significant problem in healthcare, especially within nursing. While there is a reasonable consensus regarding the sources of stress and its impact on health and well-being, little is known about the specific line manager behaviours that are associated with the effective and ineffective management of stress.
Method: Semi-structured interviews using critical incident technique were conducted with 41 employees working within 5 National Health Service (NHS) trusts within the United Kingdom. Data were transcribed and analysed using content analysis.
Findings: 19 competencies (or sets of behaviour) were identified in the management of stress in employees. The 3 most frequently reported competencies: managing workload and resources, individual consideration and participative approach, are discussed in detail with illustrative quotes.
Conclusions: Managers are vital in the reduction and management of stress at work. Importantly, the 2 of the 3 dominant competencies, managing workload and resources and individual consideration, do not feature in the UK's NHS Knowledge and Skills Framework, suggesting there are important skills gaps with regard to managing workplace stress. The implications of this approach for training and development, performance appraisal and assessment are discussed. Interventions to support managers develop effective behaviours are required to help reduce and manage stress at work.

What is already known about the topic?

- Workplace stress is a significant problem for employees working in healthcare, particularly among nurses.
- Clear associations between management and job satisfaction, and psychological and physical well-being have been reported.

What this paper adds

- This paper identifies the behaviours required by nurse managers to reduce and prevent stress in their staff.

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- A competency framework (set of behaviours) including effective and ineffective stress management behaviours is developed which offers an evidence-based practical checklist to inform the assessment of management skills, training and development.
- The comparison between the UK National Health Service (NHS) Knowledge and Skills Framework (currently used to specify the skills and knowledge required by managers working within the NHS), and the healthcare specific stress management competencies framework demonstrated that nurse managers may not be required to show all the behaviours found to be relevant to stress management.

1. Introduction

Workplace stress is a significant problem for organisations particularly for those working in the healthcare sector. It is increasingly recognised that healthcare staff, particularly nurses, are at high risk for occupational burnout and physical and psychological complaints (Piko, 2006; Ilhan et al., 2007; McGrath et al., 2003). Both a UK Health and Safety Executive (HSE) survey (2005/2006) and a survey by THOR consultant psychiatrists found that medical practitioners, and health and social welfare professionals in general fell into the group of occupations with the highest incidence of work related mental ill-health in 2003–2005 (HSE, 2006).

There is a growing body of research that recognises the link between management behaviour and stress-related outcomes: managers can cause stress by their behaviour (Tepper, 2000), they can impact on the presence or absence of psychosocial hazards in the working environment (van Dierendonck et al., 2004) and they will be involved in the design, uptake and roll-out of risk assessments and stress interventions in the workplace (e.g. Thomson et al., 2003). In a review of workplace stress in nursing, McVicar (2003) noted that leadership or management style was consistently reported to be one of the main sources of distress for nurses, and a study by Escriba-Aguir and Perez-Hoyos (2007) found that low manager support was associated with poor psychological well-being in nurses. However, there is limited research that translates to practical guidance for managers working within nursing to help reduce and prevent work-stress.

1.1. The case for a competency-based approach to workplace stress

Competency frameworks refer to a complete collection of skills and behaviours required by an individual to do their job (Boyatzis, 1982). Such frameworks are widely used in many organisations to manage individual and organisational performance (Rankin, 2004; Goldstein et al., 2001; Levensen et al., 2006), including the UK National Health Service. In October 2004, the UK NHS Knowledge and Skills Framework was launched, aiming to define and describe the knowledge and skills that NHS staff need to apply in their work in order to achieve quality results. Each manager in the NHS will therefore, in the last 2 years, have had sight of this framework and have a working understanding of competency frameworks and their applications.

The competencies included within existing management frameworks, including that of the NHS Knowledge and Skills Framework, are predominantly performance driven and do not explicitly incorporate the behaviours required by managers to manage the stress of others. That said, there is growing recognition that an effective competency framework has applications across a whole range of human resource management and development activities (Rankin, 2004). This recognition affords the opportunity to align the management of stress with existing people management practices. By defining the relevant behaviours required to manage stress in employees, these behaviours can be integrated into more general people management competency frameworks and subsequently, managing stress can be established as an integral part of a manager's role.

This exploratory study aimed to identify the specific management behaviours associated with the effective management of stress in nursing; and to build a stress management competency framework that can be integrated and compared with the NHS Knowledge and Skills Framework.

2. Method

The data collected in this study were collected as part of a wider research project, sponsored by the HSE, Chartered Institute of Personnel and Development and Investors in People, which aimed to identify the management behaviours required to manage stress effectively. The wider research project gathered data from 5 industrial sectors (Healthcare, Finance, Education, Local Government and Central Government), and from both the employee, managerial and organisational perspective. While the methodology has been previously published in Yarker et al. (2007), this paper presents findings from the sample of healthcare employees. This paper provides data on the specific behaviours required to manage stress effectively in healthcare employees, not reported elsewhere, and considers the implications for the recent publication of the NHS Knowledge and Skills Framework.

2.1. Sample

41 employees from 5 healthcare trusts within the United Kingdom were interviewed in this study. Overall, 14 interviewees were male and 27 were female. 31 interviewees worked within organisations with more than 5000 employees (6 in those with between 1000 and 4999 people, 2 in those with between 250 and 999 people, and 2 in those with between 1 and 49 people). Overall, the average team size interviewees worked within was 12 employees. The participants were recruited using flyers and posters placed on staff notice boards in the trusts whereby staff was encouraged to contact the researchers if they were willing to share their experience of managing or being managed. Recruitment was deliberately broad as we wanted to ensure that a diversity of experiences was captured and that data was not biased to one or two

organisational or team cultures. Consistent with the requirements of the NHS Ethics process, each interviewee was required to sign a consent form, agreeing to participate in the research. It was agreed that all interview data would be stored until transcribed, after which time original tapes would be destroyed. The procedure was also consistent with the UK's Data Protection Act.

2.2. Interview development

An interview proforma was developed to elicit information about specific managers' behaviours that impacted upon the well-being of their employees. For all interviews a critical incident technique was used, defined 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' (Flanagan, 1954). The use of this technique facilitates the revelation of issues of critical importance to the interviewee and enables issues to be viewed in their context. Although a rich source of information, one of the main disadvantages is that it relies on accurate and rich recollection of events by the interviewee. In order to partially combat this, all employees were sent an email 2 days before the interview prompting them to think about specific incidents 'in which managers' behaviour impact upon their well-being at work'.

Before taking part in the interview, in order to ensure all participants drew from the same frame of reference (Chell, 1998), interviewees were asked how they defined work related stress and were provided with the HSE definition 'stress is the adverse reaction people have to excessive pressures or other types of demand placed upon them'. They were then asked to describe two critical incidents, firstly a time when they had been managed effectively at a time of pressure and demand; and secondly a time when they had been managed ineffectively at a time of pressure and demand. Throughout the discussion, participants were asked to identify what their manager did and what the result of the action was. The focus was upon behaviours exhibited rather than the thoughts, feelings or motivations of the participant. In this way, the participants were not asked to define what constituted 'effective' and 'ineffective', but rather the definition of effective and ineffective management emerged from the analysis of the interviews. The interview schedule was piloted with two employees. Upon examination of resultant interview transcripts, minor improvements were made to the proforma.

2.3. Data analysis

Each interview was recorded and transcribed. Following rejection of one healthcare interview due to sound issues, the total number of interviews suitable for analysis was 40. The transcripts were downloaded onto NVivo data management system for ease of storage and analysis. Once the transcription was completed, behavioural indicators were extracted from each interview transcript using content analysis (Miles and Huberman, 1984). This method 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; Narayanan et al., 1999). The coding framework for the content analysis was generated using data from the whole wider project sample (including non-healthcare sector employees and managers). No differences were found between the themes reported by the employees and managers, nor between sectors and therefore the same coding framework was applied to all data. 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 then independently extracted by the two researchers from 20 randomly chosen transcripts (10 employees and 10 managers) and written onto 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 cards into behavioural themes. Two researchers discussed the themes emerging from the initial card sort and the themes were transferred onto NVivo to create the initial coding structure. Content analysis was then conducted on the remaining transcripts. Following completion of content analysis, the emergent framework was developed which included 19 behavioural themes, or 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. The final competency framework was then compared to the NHS Knowledge and Skills Framework using a mapping exercise to identify the commonalities and differences between the two frameworks. Two researchers completed this task which involved highlighting those competencies identified in the stress management framework that were also explicitly mentioned within the NHS Knowledge and Skills framework, and also to highlight those competencies that were not included in that of the NHS framework. The two researchers then came to an agreement around the comparison between the two frameworks.

3. Results

In total, 524 behavioural indicators were identified and coded from the 40 transcripts, giving an average of 13.1 per transcript. The content analysis elicited 19 competencies. 14 of the 19 competencies are presented in Table 1 with positive and negative indicators. The remaining 5 competencies, 'Seeking Advice', 'Health and Safety', 'Feedback', 'Managing Conflict', 'Knowledge of Job', were mentioned less than 1% of the time by interviewees and subsequently, the positive and negative indicators are not detailed here.

The three most frequently mentioned competencies reported by the participants are explored in more detail below.

Table 1
Stress management competency framework with positive and negative behavioural indicators ranked in order of dominance of theme.

Competency	Positive examples of manager behaviour	Negative examples of manager behaviour
Managing workload and resources	Bringing in additional resource to handle workload	Delegating work unequally across the team
	Aware of team members ability when allocating tasks	Creating unrealistic deadlines
	Monitoring team workload	Showing lack of awareness of how much pressure team are under
	Refusing to take on additional work when team is under pressure	Asking for tasks without checking workload first
Individual consideration	Provides regular one-to-ones	Assuming everyone is ok
	Flexible when employees need time off	Badgering employees to tell them what is wrong
	Provides information on additional sources of support	Not giving enough notice of shift changes
	Regularly asks 'how are you?'	No consideration of work life balance
Participative approach	Provides opportunity to air views	Not listening when employee asks for help
	Provides regular team meetings	Presenting a final solution rather than options
	Prepared to listen to what employees have to say	Making decisions without consultation
	Knows when to consult employees and when to make a decision	
Accessible/visible	Communicating that employees can talk to them at any time	Being constantly at meetings/away from desk
	Having an open door policy	Saying 'don't bother me now'
	Making time to talk to employees at their desks	Not attending lunches or social events with employees
Empowerment	Trusting employees to do their work	Managing 'under a microscope'
	Giving employees responsibility	Extending so much authority employees feel a lack of direction
	Steering employees in a direction rather than imposing direction	Imposing a culture of 'my way is the only way'
Communication	Keeps team informed what is happening in the organisation	Keeps people in the dark
	Communicates clear goals and objectives	Holds meetings 'behind closed doors'
	Explains exactly what is required	Doesn't provide timely communication on organisational change
Dealing with work problems	Following through problems on behalf of employees	Listening but not resolving problems
	Developing action plans	Being indecisive about a decisions
	Breaking problems down into manageable parts	Not taking issues and problems seriously
	Dealing rationally with problems	Assuming problems with sort themselves out
Acting with integrity	Keeps employee issues private and confidential	Speaks about employees behind their backs
	Admits mistakes	Makes promises, then doesn't deliver
	Treats all employees with same importance	Makes personal issues public
Process planning and organisation	Reviewing processes to see if work can be improved	Not using consistent processes
	Asking themselves 'could this be done better?'	Sticking too rigidly to rules and procedures
	Prioritising future workloads	Panicking about deadlines rather than planning
	Working proactively rather than reactively	
Development	Encourages staff to go on training courses	Refuses requests for training
	Provides mentoring and coaching	Not providing upward mobility in the job
	Regularly reviews development	Not allowing employees to use their new training
	Helps employees to develop within the role	
Empathy	Takes an interest in employee's personal lives	Insensitive to people's personal issues
	Aware of different personalities and styles of working within the team	Refuses to believe someone is becoming stressed
	Notices when a team member is behaving out of character	Maintains a distance from employees 'us and them'
Taking responsibility	Steps in to help out when needed	Saying 'its not my problem'
	Communicating 'the buck stops with me'	Blaming the team if things go wrong
	Deals with difficult customers on behalf of employees	Walking away from problems
Expressing and managing own emotions	Having a positive approach	Passing on stress to employees
	Acting calmly when under pressure	Acting aggressively
	Walking away when feeling unable to control emotion	Loosing temper with employees
	Apologising for poor behaviour	Being unpredictable in mood
Friendly style	Willing to have a laugh and a joke	Criticises people in front of colleagues
	Socialises with team	Pulls team up for talking/laughing during working hours
	Brings in food and drinks for team	Uses harsh tone of voice when asking for things
	Regularly has informal chats with employees	

3.1. Managing workload and resources

This theme was referred to more often than any other competency. The majority of referrals were examples of effective management behaviour (65%) relating to managers monitoring their team's workload (both when workload was high and when it was low), setting realistic deadlines, as well as taking action such as refusing additional work or procuring additional work.

> *She recognises rightly that the work is too much for one person so that was good. Something about her, yes, her caving in and giving me an admin support person when I needed it, made such a difference to my stress levels, it was fantastic.*

Of the examples of ineffective management behaviour (33% of referrals), 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 and not being able to cope.

> *I've begun to lie about the amount of work I have. What I've discovered is my boss, she doesn't show it on her face, but I think she becomes quite stressed out herself by hearing how much work I have outstanding.*

A common theme within this category was line managers were passing deadlines and pressure on to their team members that they themselves had had passed to them from their managers.

> *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!.*

3.2. Individual consideration

This was the second most dominant theme. The vast majority of referrals (87%) were positive examples, 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 such as allowing flexible working hours, ensuring employees took lunch breaks and left work on time, supporting employees while absent through illness and organising return-to-work programmes.

> *I've got bad IBS and I hadn't had any help from my GP in managing it. It was only when I came and was referred by <my manager> to dietetics that I've actually got a grip on it and got much more of a handle on things.*

Negative examples in this category generally related to managers who were inconsiderate of issues such as illness at work, return to work and well-being in the team.

> *I asked for compassionate leave while my sister was dying with cancer and my reaction <from my manager> was 'If there's no children involved, it's not important'. I didn't get leave.*

3.3. Participative approach

In this third most dominant theme, an overwhelming number of examples (84%) 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.

> *We were told this change (a departmental move) could be months or even years ahead, but if we had to do it, if we had to move, what were our thoughts and opinions. We were openly canvassed and our decisions taken into account.*

The 16% of referrals that were examples of negative behavioural indicators, surrounded managers who did not listen.

> *I always felt it was very difficult getting our voice heard. And what I found very difficult was when I used to get a call saying 'why hasn't this been done?'. And I would say 'well because we don't have the money in, I told you about this*

Table 2
Comparison between the stress management framework and the NHS Knowledge Skills Framework (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 and organisation Participative approach
Quality: Contribute to improving quality *Equality and diversity*: Promote equality and value diversity	Acting with integrity

Note: The following stress management competencies do not fit within the KSF Framework: managing workload and resources, dealing with work problems, accessible/visible, feedback, knowledge of job, seeking advice, empowerment, individual consideration, expressing and managing emotions, friendly style and empathy.

nine months ago. It got through to him because someone outside our department has made an issue out of it, someone who is more senior that we are, and it's listened to. I find that a difficult thing.

3.4. Comparison between the stress management framework and the NHS Knowledge and Skills Framework

The emergent stress management framework was compared with the NHS Knowledge and Skills Framework, using core dimensions in Level 3 management level (Table 2). Managers in the NHS are already expected to demonstrate 8 of the 19 stress management competencies. Despite this overlap in a number of areas, 2 of the 3 most commonly mentioned competencies, 'managing workload and resources' and 'individual consideration', were not included in the NHS Knowledge and Skills Framework.

4. Discussion

This study aimed to identify the specific management behaviours associated with the effective management of stress in healthcare employees; and to build a stress management competency framework that can be integrated and compared with the NHS Knowledge and Skills Framework. Two key findings are discussed: first, the research identified 19 competencies or discrete sets of behaviours associated with the reduction and prevention of workplace stress, with both positive and negative behavioural indicators. While previous research has identified a link between management style and psychological and physical health outcomes (e.g. Sosik and Godshalk, 2000; Hetland et al., 2007; Nielsen et al., 2008), only a small amount of research linking manager behaviour to employee health outcomes has been conducted within a healthcare setting (e.g. Gilbreath and Benson, 2004; van Dierendonck et al., 2004; Escriba-Aguir and Perez-Hoyos, 2007), this is the first study to identify the specific manager behaviours that are associated with workplace stress in healthcare employees. Second, the comparison between the emergent stress management framework and the NHS Knowledge and Skills Framework identified that while there was some overlap there were also significant differences. Although 8 of the 19 stress management competencies were identified as part of the existing NHS Knowledge and Skills Framework, the majority of behaviours that were highlighted as being important for the management of stress in employees were not mentioned. While it is recognised that competency frameworks cannot include endless lists of behaviours to be demonstrated by managers, the absence of the 2 of the most frequently reported competencies in the study; 'managing workload and resources' (where manager behaviours include arranging for extra staff when needed, monitoring and awareness of teams workload, having realistic expectations on delivery) and 'individual consideration' (where manager behaviours include providing regular one-to-ones with employees and flexibility with regards to work-life balance issues) is important.

Much research in the healthcare sector has focused upon the key stressors in nurses working lives. A general consensus in the literature is that workload is one of the most impactful (e.g. Stordeur et al., 2001; Healy and McKay, 2000; Demerouti et al., 2000). It is interesting that specific management behaviour relating to workload and managing demands is not included within the NHS Knowledge and Skills Framework. Further, Stordeur et al. (2001) ranked the other important stressors (after workload) as conflict with managers or peers, lack of clarity about tasks and goals; and shiftwork. Importantly, the management behaviours identified in this study that may be relevant to the management of these stressors, for instance 'friendly style', 'empathy', 'expressing and managing emotions' for the stressor of conflict with managers or peers; 'dealing with work problems', 'Feedback' and 'Knowledge of Job' for the stressor of lack of clarity about tasks and goals; and 'individual consideration' for shiftwork; are all behaviours that were not found to be explicitly mentioned within the Knowledge and Skills framework. This suggests that nurse managers are not currently explicitly required to exhibit those behaviours found, in this study, to be most important to effective stress management, a finding that may have important implications for the experience of stressors among nursing staff.

4.1. Limitations of the research

The qualitative nature of this research does not allow for the definitive testing of theory (Bryman, 2004), however the approach was most suitable in this example to satisfy the exploratory objectives of the research and used by other studies (Patterson et al., 2000). In understanding the potential subjectivity bias with research of this nature, steps were taken to ensure a rigorous research design (such as inter-rater reliability testing) to limit the possible effects of this bias. There is no reason to suppose that those who participated in this study differ greatly in their view of effective or ineffective stress management from other nurses employed within the UK or internationally. Our sampling strategy deliberately recruited employees working from across 5 different NHS Trusts to ensure that we sampled a breadth of experience and that our data was not dominated by the culture or experiences in one trust, department. Furthermore, within the study of work-stress, reasonably consistent sources of stress have been identified internationally (e.g. Bosma et al., 1997; de Lange et al., 2003) and therefore we can be reasonably confident that the relevance of the behaviours could transfer to those working in nursing environments overseas. Longitudinal quantitative research is required to test the validity of the stress management framework, developing a clearer understanding of the associations between the specific management behaviours identified and stress-related outcomes over time. This further research could aim to refine the framework and seek to examine whether 1 or 2 competencies have a significant impact on health outcomes, thereby informing the prioritisation of interventions such as training and development.

4.2. Implications for practice

Managing workplace stress in nursing is becoming an increasingly important issue: there is a need to reduce

nurses' exposure to workplace stress and put in place effective interventions to reduce and prevent stress at work so as to maintain job satisfaction, reduce absenteeism and turnover, and improve physical and psychological health. Managers can play a pivotal role in this. However, recent reports suggest that stress management is not currently a responsibility for most managers within the NHS (Consult Gee, 2006). The creation of the NHS Knowledge and Skills Framework demonstrates that managers are being held responsible for their behaviour and being trained and developed to effectively manage their employees. This research, using a competency approach, therefore represents a highly relevant way to integrate stress management into existing people management frameworks in the NHS. By providing managers with a clear specification of those behaviours required to manage in a way that prevents and reduces stress at work, in a language that is common to them, managers can learn to apply them in their own work area. Managers can use this framework to get feedback on the extent to which they are behaving in the ways consistent with effective stress management. If gaps in skills are recognised, training and development could be requested.

The framework can also be used by healthcare organisations to inform training and development interventions, to guide selection and assessment interventions and as a mechanism to integrate stress management into performance management frameworks. 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, resulting in enhanced well-being for employees.

Conflicts of interest. None.

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Contributions. JY and EDF were responsible for project management and design. RL and PF were responsible for recruitment, data collection and analysis. RL and JY were responsible for drafting the manuscript. JY, RL, EDF and FM made critical revisions to the paper for important intellectual content.

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