Occupational Stress: Are We All Talking About the Same Thing?

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Abstract

Occupational stress is of increasing concern for employers and employees. The term stress has multiple, and at times conflicting, definitions and uses in the academic literature. In addition very little investigation has related to how employees define stress, and whether their definitions have any relationship to those used by academics. This may call into question the relevance of academic research to those who experience, or must attempt to manage, stress. This paper investigated managers' experiences and concepts of stress and finds a core of agreement between managers' experience of stress and academic definitions.

Occupational Stress: Are We All Talking About the Same Thing?

Stress, and occupational stress in particular, has become a major issue in the public eye. Quite apart from the often reported costs, physical, mental, and financial of stress (ASCC, 2007; Atkinson, 2000; Bejean & Sultan-Taieb, 2005; Cartwright & Boyes, 2000; HSE, 2006; Midgley, 1997) (ASCC, 2007; Atkinson, 2000; Bandler & Grinder, 1982; Bejean & Sultan-Taieb, 2005; Cartwright & Boyes, 2000; HSE, 2006; Midgley, 1997) most people in casual conversation will admit to some level of stress, often related to their work situation; 91% according to Lifeline Australia ("<Lifeline Australia - Stressed Out Australia - Survey Sparks Call for Urgent - 03jul08.pdf>,"). Since at least 1984 (Murphy, 1984) authors have bemoaned the inconsistency of terminology and definitions used in the literature, and the problems this causes. Some (Doublet, 2000) have even gone so far as to suggest that there is no such thing as stress, partly because its definition is so amorphous. This may represent a fairly extreme view but the lack of any agreed terminology or definition is a continuing problem (Le Fevre, 2008; Nash et al., 2010; Nasiri Khoozani & Hadzic, 2010).

Recently there have been efforts in the academic literature to develop better definitions of stress (Nasiri Khoozani & Hadzic, 2010) and more consistent ways of assessing it (Nash, et al., 2010) albeit in the last case primarily in a military setting. Most of this debate, however, is academically centred. It is inward looking and may have little relevance or resemblance to what most people mean when they talk about stress. It seems important that some concordance exist between what academic researchers define as stress, no matter how inconsistently, and what those who express themselves as "stressed" actually mean. i.e., what

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do people mean when they say "I'm stressed"? Without evidence of some agreement the relevance and validity of academic research into stress for practitioners may be called into question. The academic literature appears to have very few examples of enquiry into so called "lay" definitions of stress (Dewe & O'Driscoll, 2002; Kinman & Jones, 2005) and those that do exist have tended to either be a little indirect in their approach (Kinman & Jones, 2005) or have used a relatively narrow approach using predefined psychometric constructs (Dewe & O'Driscoll, 2002; Rydstedt, Devereux, & Furnhams, 2004).

The study reported here was part of a larger effort examining the effectiveness of stress management interventions (Le Fevre, 2008). As part of that project, managers were asked about the nature of their job and workplace to give some context to the study and were also very directly asked "When you say I'm stressed, what does that mean?" This was in order to give some reassurance that what the researcher was investigating based on academic theories and models bore some resemblance to what the participants were experiencing.

Methodology

Method

A descriptive qualitative approach was used for this study and the research questions being investigated were:

- How do managers define stress?
- What is the workplace like in terms of demand, interpersonal interaction, and change?

Participants

Participants were 14 managers working in the telecommunications industry in New Zealand and Australia.

Procedure

Participants were recruited through e-mailed requests to take part in follow-up interviews after the end of the SMI project (Le Fevre, 2008). A total of 66 e-mail invitations were sent to all participants. Of these, 19 invitations were sent to participants from the Australian organisation and 47 to participants from the New Zealand organisation. All e-mail requests were followed up by telephone, usually resulting in voice mail messages being left. Seven participants from the Australian organisation replied accepting the invitation and arrangements were made to carry out the interviews over a 2-day period at the organisation's head office in Sydney. Unfortunately, 2 of the participants were unable to attend the scheduled interviews due to unexpected work commitments so 5 interviews were carried out. No other replies were received from the Australian organisation, either to repeat e-mails or to voice mail messages left prior to the deadline for arranging the interview schedules. Fourteen participants from within the New Zealand organisation replied, 3 declining to take part and 11 accepting. Of the 11 who accepted 2 later had to withdraw, one due to an overseas transfer within the organisation, and one due to increased work commitments. No other replies were received from participants within the New Zealand organisation either to repeat e-mails or to voice mail messages left prior to the deadlines for arranging the interview schedules.

Interviews were carried out by the author either in Sydney or in Auckland at the offices of the employing organisation for each participant. Notes were taken by the interviewer during the interviews to record gestures or expressions that may have modified interpretation of the audio record by adding a further dimension to the communication that occurred at the time. Notes were kept brief to allow the interviewer to concentrate on what was being said and to appropriately question and probe. A semi-structured interview format (Flick, 2006) was used with standard questions maintaining a coherent structure between respondents while allowing a relatively free discussion to develop where respondents were so inclined. All interviews were recorded to mini disk for later transcription and analysis.

Analysis

All interviews were transcribed by the researcher and entered as source documents into NVivo. Transcripts were read several times to begin the process of extracting themes. An open coding approach was used to develop a coding framework (Bryman & Bell, 2003; Miles & Huberman, 1994). Two parallel approaches were used to code the participants' responses. Initial coding consisted of simply gathering together all the participants' responses to each question using the auto coding feature of NVivo 7. This process enabled the interviews to be read two ways, both as narratives by each respondent and as sets of comparative responses question by question. From this joint-structure reading approach more narrow areas of commonality emerged, were noted, defined as themes, and used to code responses. Where such themes emerged later in the analytical process, previously coded material was reviewed to enable the new themes to be included where appropriate. During this process some areas of text were coded to more than one theme as sufficient of the responses were coded to retain intact the sense and context within which the coded text occurred.

Findings and Discussion

In the following discussion it should be noted that the participants' statements used to illustrate particular ideas often emerged as part of the discussion related to questions that were not, *a priori*, associated with that idea. (e.g., statements referring to high pressure in the job may have been made while responding to a question relating to other issues).

In the following section some conventions are observed to fairly represent the complexity inherent in the responses, aid clarity, and preserve the anonymity of participants. All directly quoted material is within quotation marks and is italicised. Where portions of text have occasionally been excised to reduce the length of quotes or remove material not necessary to maintain the meaning and intent, ellipses (...) are used. Quotes are identified as originating from either New Zealand or Australian managers and, where proper names were given by the participant they have been replaced by [Name] in the text for personal names or [Organisation Name] for the name of participant, or any, organisations.

Organisational Context

The two organisations from which the interviewees were drawn were the New Zealand and Australian operations of the same multinational telecommunications corporation. They share a significant core set of values and, more formally, policies and standard operating

procedures despite their geographical separation (S. Gotty, personal communication, May, 2005).

Telecommunications is usually characterised as a high-tech, fast-paced and dynamic industry which seems to be reflected in the reported characteristics of the two subject organisations. This is demonstrated in the following quotes.

- "It's a dynamic industry and probably a very dynamic organisation." [Australian manager]
- "... it's mainly what I was saying about fast paced, dynamic, forever changing, restructures, moving different departments, different projects..." [New Zealand manager]
- "...[Name] has often said- the previous CEO this is the most dynamic environment he has ever worked in..." [Australian manager]

Against this background of industry-related dynamism these particular two organisations appear to share a cultural milieu of high pressure and rapid change. All interviewees mentioned the rapidity with which projects and priorities within the business could change, and all also related this rapid change to ideas of pressure and lack of control over outcomes. These are both factors considered to be associated with occupational stress (Spector, 1998; van der Klink, Blonk, Schene, & van Dijk, 2001). Pressure and lack of control are reflected in some of the following examples relating to the fast pace of the environment.

- "...because of the pace of change in this industry: you know, if you don't keep up with the new technology you're dead. Things do change before we've even had time to launch something and it's already redundant." [New Zealand manager]
- "I think with [Organisation Name] it's such a fast paced environment...we change all the time, in fact I've never worked in such a fast changing environment before. You start working on a project and then it changes focus or it stops. You know that can be a really hard environment to work in and I think, you know, that's why we have such a lot of burnout here at [Organisation Name] because of the nature of the environment." [Australian manager]
- "A very simple example [of lack of control] our budget constraints. You plan a thing and then it can't happen because of the budget constraints." [Australian manager]
- "...for instance I was working on a resourcing project for a year, nearly to the end, nearly to the business, and suddenly it got canned, and that sort of pressure and when you've been working on something and it just changes, and it changed because we didn't have the budget, and for good reasons but when you put your heart and soul into something and then it suddenly changes. It's that that you've got to deal with and you've got to become very resilient and just roll with the punches." (laughs) [New Zealand manager]

Respondents frequently commented on the effect that the felt pace and pressure in their working environment had on their lives, both in their work and private capacities. For example:

"I used to come in to work and work most weekends when I first worked here at [Organisation Name] like [Name] is doing now. Like he is fairly new he's working some crazy hours and so are a lot of people around here, crazy hours, and I used to come in every weekend and I just refuse to do that now and, yeah so I guess I have adapted (laughing)." [Australian manager]

"I do have periods after very exhaustive and quite difficult meetings sometimes go over eight hours I feel really drained and all I can do is go home and sleep." [New Zealand manager]

"I often get quite anxious, quite nervous on a Sunday night about work on a Monday 'cause in my mind I'm always thinking ahead and thinking OK I've got to do this this week ... I get a bit anxious and I find it really hard to sleep on a Sunday night." [Australian manager]

Despite the repeated perceptions of pressure and stress one can't help but be struck by the generally high energy and enthusiasm of the organisational members as the following quotes show.

"There's always something interesting going on. So it goes, up and down; but I am at the moment on the upward curve because of the change and I've got a new area so, up and down and challenge. And the old one is becoming boring, but as long as there is something to balance and you're challenged, well the old boring stuff can stay..."
[Australian manager]

"I took this role and it's a challenge for me. It's a totally different skill set so, even though I've found it to be very difficult, and handover could have been done a lot better, it has been very challenging and I am enjoying it." [Australian manager]

"I mean today I'm having a great day and I've got an awful lot on, but, it's like 'great' 'cause I'll just get on and do it." [New Zealand manager]

"I like my job very much. Yes I do" [New Zealand manager]

Every meeting room and most work spaces in both organisations have notices, with the corporate logo and colour, exhorting standards of energetic and enthusiastic work and customer service. Unfortunately given the wording of the notices and the nature of the businesses it is impossible to directly quote them without instantly identifying the organisations concerned. The organisational context within which these managers live and work seems to be one of frequent change due to the dynamic nature of the industry, with the pressure that almost inevitably goes with such rapid change. This is felt by most organisational members interviewed as both pressure to perform and some lack of control due to relatively frequent project changes and, at times, budget restrictions. Long work hours are frequently reported by managers as illustrated below.

"Oh yeah, by the time it's time to go home it's dark. I mean I'm here 'till six o'clock, maybe a little bit later; it's dark." [Australian manager]

"... the problem with this one is I've worked 60 hours for six or eight weeks so I've got a load of extra time there that I'm probably not going to get back and I can't necessarily afford now to take a week off because I've got the next bit hard on its heels and still got issues from the first one ... Every year we get busier and that will just continue." [New Zealand manager]

Not all managers, however, agree with the idea that such long hours are required by the organisation as is illustrated by the example below.

"[Organisation Name] creates an environment that is not what I'd call a presenteeism culture, but it's down to the individual to take that on board. Some people have worked in other organisations where presenteeism is the culture and they bring it with them. So although the company supports a different culture it's down to the individual to take advantage of that. I know for a fact that some people don't take advantage of that but I do." [New Zealand manager]

It is possible, therefore, that some of the pressure felt may be self-generated although only one respondent expressed the above opinion and no other members of the respondent's team were interviewed. It is quite possible that differences between the cultures of individual teams within the organisation have a role to play here. Unfortunately the nature of this sample of participants (there are no multiple members from any team) does not allow this possibility to be examined.

In summary the respondents' perceptions of the organisational context within which they work appears to be characterised by high demand, pressure, relatively rapid change, and some lack of control often related to budget restrictions. Most feel that long work hours are required though two respondents expressed different opinions. One suggested that the perception of a requirement for long hours may be something that people bring with them from previous employers, and one makes clear that they no longer work the long hours they did when they first joined the organisation having realised that "you don't actually get any thanks for that and you need to be smarter in how you work." [Australian manager]

Yet within this environment there is still considerable enthusiasm and energy for the job.

Participants' definitions and experiences of stress

All participants were asked what they meant when they said "I'm stressed". In the discussion following this question, several related themes emerged that may be described under the headings of "workplace overload", "general overload", and "internally focussed conceptions of stress". These were related to different aspects of the way stress was defined and experienced by the participants.

The following quotes may best illustrate the workplace overload theme.

"... overloaded, too much to do, not in control of things." [New Zealand manager]

"Too much happening at once, and I used to have a phrase with a friend of mine, where an "it's all too much moment", where there's just too many things happening at once and it really seems like it's just all too much." [New Zealand manager]

"The expression 'pushing shit uphill' comes to mind." [Australian manager]

"I think work overload" [Australian manager]

These responses all reflect a primary concern with feelings of having too much to do, or perhaps too many different things to do in the work place and are reminiscent of the idea of role overload as exemplified by the work of Kahn (Kahn, 1974; Kahn, Wolfe, Quinn, & Snoek, 1964).

In terms of the general overload theme, one manager specifically referred to a tendency to voluntarily assume too many responsibilities in and outside work and another referred directly to other pressures outside the work environment.

"but usually for me it's about taking on too much and then it all kind of hits all at once so it is my own fault usually" [New Zealand manager]

"not having a good work-life balance, so trying to manage you know a property outside work, on the committee of, the strata committee trying to make all these changes there and do everything at work so I'm not really relaxing at home er, putting too much pressure on myself. Yeah I guess it's a number of things yeah." [Australian manager]

This general overload theme may be illustrative of spill-over where stressors outside the workplace affect occupational stress, and workplace stressors affect general stress levels outside the workplace, a process which may lead to an overall increased level of stress both in and out of the work situation (Leiter & Durup, 1996).

Most participants reflected on a more internally focussed conception of potential stressors and form the third theme.

"I personally after trying to define stress would think it stress is someone not being able to meet one's own expectations." [Australian manager]

"I think it means a number of things. I feel probably a great weight of responsibility. When I'm particularly stressed I can feel that it's almost insurmountable whatever the particular issue is" [New Zealand manager]

"I'd associate with that an uncertainty around certain decisions that have to be made, definitely when it affects myself, but probably more so when it is something that is going to affect other people. That would probably be more stressful, more anxiety creating. That would probably be it." [Australian manager]

As far as these managers were concerned the prime workplace stressors were centred around work pressure and multiple concurrent demands and, for some as expressed above, uncertainty surrounding decision making. This latter concern recalls ideas related to role

conflict where managers become uncertain about how to act or make decisions in response to a lack of clarity in their work roles, a situation which, it has been suggested, leads to increased stress (Rizzo, House, & Lirtzmann, 1970). Most respondents also did not closely distinguish between stress and stressor in their responses to the initial question. This lack of distinction is perhaps best illustrated by the single reply below, which contains references to external pressure and demand, emotional response, and physiological response in a single answer to the initial stimulus question.

"It's usually just things flying around too much I found too sometimes it's can't concentrate. I found that a bit last week, when I had lots of projects to manage and I had lots of people coming to me to ask questions and stuff. I'd start something and then forget what I was doing, be easily diverted into something else. I have on occasions felt physical, like a couple of occasions when you know, you can't take a deep breath it's hard to breathe and I guess the other one is you sort of feel more emotion. I had one like that last week, the really horrible day lots and lots of emotions running really hot amongst the whole team so I found that I got more angry. And when I left a particular meeting, I felt quite emotional. I sort of could feel the tears coming and I don't do that. Those are the things, but usually it is too many things going on in my head" [New Zealand manager]

When it came to describing their experience of stress participants' responses covered various aspects including emotional and physiological responses, perceived cognitive impairment such as confusion or inability to concentrate, and some behavioural patterns, often in combinations. Some examples are summarised in Table 1.

The literature concerning non-academic and non-professional interpretations of stress is relatively sparse (Kinman & Jones, 2005) but it is interesting to note some parallels between the findings of this study with earlier work, especially the most closely related study of Kinman and Jones. In a similar manner to the current study, Kinman and Jones were interested to find what people meant when they said they were stressed. Whereas in the current study that question was posed quite directly "When you say 'I'm stressed' what does that mean?", Kinman and Jones were a little more indirect. They asked six questions in a semi-structured interview approach with question one "What do you think the term 'occupational stress' means?" (Kinman & Jones, 2005, p. 107) being their slightly less direct question. The authors specifically stated that they wished to elicit their interviewees' opinion on the concept of stress in general rather than their personal, first hand, experiences thereof. Despite the differences in approach and the potential influence of recent stress management training and psychometric survey on the current sample there are strong parallels in the findings.

A third of Kinman and Jones' (2005) interviewees conceptualised occupational stress as negative stimuli such as work overload whereas all interviewees in the current study regarded overload as a prime stress while also acknowledging other more internal aspects such as "a great weight of responsibility" and uncertainty as contributors to a stress response.

Table 1: Participants' descriptions of their experiences of stress with indications of emotional (E), physiological (P), cognitive (C), and behavioural (B) reference

emotional (E), physiological (P), cognitive (C), and behavioural (B) reference	Г	Ъ		Ъ
Quote	Е	P	C	В
"It could mean that I'm stressed because I just don't know what to do next. I've got	X		X	X
all these things in my head that I know I need to do and I just can't clearly pick one				
out and do it. Or I'll start doing it I did it yesterday. I started doing something,				
did something else, did something else, having about five different conversations				
with people all at the same time em, and like handling three or four tasks. And				
yeah, multitasking's great but there comes a point where I'm saying "Am I really				
actually getting anything out of this?" I'm just expending my energy on it and I'm				
not getting anything back." and "Yeah the whole not being able to pinpoint one				
thing, not being able to focus. And maybe being a bit agitated and finger tapping				
and you know that would be a physical attribute of it and sometimes I don't like				
huffers, but sometimes I'll have a huff." and "Just annoyed, just like I know it				
doesn't have to be like this. If it's someone else that's put this upon me well that's				
what I hate, but it's just general annoyedness pissed-off-ness." [Australian				
manager]				
"Em, I think, a number of things you often em for me it's more of a physical	X	X	X	X
thing. I can feel it in my body very quickly. I get flushed, (giggled and flushed)				
tense in my shoulders em, my heart starts to race, em yeah it's a very physical				
reaction to me. I just get very anxious em, my mind becomes a bit cloudy, I start				
working really quickly, and em, yeah it's just a feeling of 'Oh shit!' (laughs) yeah.				
You just, you just don't know where to start and you just feel overwhelmed and				
what that must do to your body is just; yeah!." [Australian manager]				
"What would that translate to? Probably a typical sensation I would be agitated I	X	X	X	X
would feel a bit fuzzy in the head, I would probably feel like my blood pressure was				
growing up I would feel a bit of pumped up like that. Maybe some other things like				
a tightness in the neck or the back something like that. And from a mental point of				
view I'd say confusion to a certain extent, just being unsure of everything is clear				
in your head, and possibly it leads to a kind of procrastination where there's so				
much to do what you do first?" [New Zealand manager]				
"I think in the first instance it's probably a little bit of anger that you're so busy,	X			X
but I think after that it would probably turn the other way and become oppressive				
because you would feel that you, well I would feel that I'm not performing to the				
best of my ability so I'd be angry but also distressed and perhaps a little bit				
depressed about it." [Australian manager]				
"Okay! The symptoms are that inability to focus on one thing plus the feeling of	X	X	X	
being out of control kind of a drowning feeling sometimes and increased pulse even				
so physical manifestations sometimes even kind of a cold sweat but not quite to the				
n'th degree just very slight." [New Zealand manager]				
"There are certain things I do, that I only do in a stressful situation and if I see	X			X
myself doing them I know that I'm stressed: obsessive things, repeating things. If I				
ever see myself doing that then I know. Things like shut the car three times and				
make sure it is locked, not be happy with something I've written down from notes				
and just rewrite it there's really no need to do that, I'll find that I'm preoccupied				
with how much I've got ahead of me." [New Zealand manager]				
"Where stress for me comes into is when I feel there is little moments where you're	X		X	
just holding on just by the tips of the fingers and then suddenly you don't feel				
anything (gesturing with fingertips, hands clawed) and you think 'shit am I falling,				
my man ingertape, mand claimed you mind sint and I fatting,	ь	l	l	

am I finding something else.' And that's exactly how it feels to me and those situations are quite simply I don't know what's next, I don't know my diary, I don't know where things are at, I don't know what stage people are working on things. It's usually very much a light touch approach when you feel that you haven't got that, that you think wow! Stop. I've got to go all the way back and re-establish all that again so I can get my anchor point again, and then I can still just hold on with fingers I don't need to hold on tight I just need to hold on with fingers that's fine. That's when I feel stressed is when I just don't have that certainty of just knowing what's generally going on." [New Zealand manager]		
"When I was younger and really worked way too hard I remember driving home and vomiting in my own lap because I was so stressed and tired and exhausted and I was about 30 then, that when I was about the worst." [New Zealand manager]	X	

Those interviewees of Kinman and Jones who conceptualised occupational stress as primarily a response to external stimuli (20% of their sample) showed a range of ways of describing the response, which Kinman and Jones categorised as physical responses (e.g., departure from physical health), cognitive responses (e.g., inability to think clearly), affective responses (e.g., departure from optimum psychological functioning), and as a combination of all of these. As shown in Table 1 and elsewhere in the current study, a similar complex multifaceted concept seems to underpin the responses given by this group of corporate managers. Similarly to Kinman and Jones' findings, participants in the current study often gave responses that contained aspects of some or all of emotional, physiological, cognitive, or behavioural interpretations of stress.

Other researchers (Dewe & O'Driscoll, 2002; Rydstedt, et al., 2004) have also investigated non-academic interpretations and concepts of occupational stress. Rydstedt et al. investigated the relationship between lay theories of stress and resulting distress in a longitudinal study and found a small but significant effect in that beliefs regarding the causes and alleviators of stress were related to longer-term perceptions of mental stress. Dewe and O'Driscol were more directly concerned with managers' conceptions of stress and how they related to the actions managers may take to reduce stress in their organisations. The findings from this study suggested that individuals who perceived they had little control over stress factors in their workplace were more likely to consider stress and its management as a managerial responsibility than as an individual responsibility. These studies took a, perhaps, more narrow stance due to the prime use of psychometric instruments, with their predefined constructs, to elicit responses regarding stress rather than the more open approach of Kinman and Jones (2005), though Dewe and O'Driscol did also employ some more open questions in their survey. Kinman and Jones employed semi-structured interviews to elicit lay representations of work stress.

Conclusion

In summary it would seem clear that despite Doublet's (2000) claim that there is no such thing as stress, managers, at least these managers, certainly share a core perception that stress not only exists but that they experience it. That what they experience is indeed both complex and difficult to define is also clear, however there does appear to be a common core shared between these "lay" concepts and academic constructs of stress as shown by the themes that emerged in this study. i.e. stress is experienced as physical manifestations as well as psychological and emotional states, and behavioural outcomes often with little differentiation between these different aspects. The academic use of the term stress to refer to environmental stimulus, psychological and physiological and psychological manifestation, and behavioural outcome is therefore reflected in these managers' experience. Perhaps Doublet (2000) has a point and a new terminology is required to replace such an ill-defined term. In the meantime, however, there does appear to be general agreement between academic and non-academic concepts of stress even though that agreement encompasses considerable confusion.

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