


Stress and strain

Ronny Lardner and Bob Miles, our regular industrial psychology contributors, demystify the topical issue of workplace stress, and indicate what can be done about it.

 A SEASONED IChemE conference delegate recently said he did not understand why there was such a fuss about stress. He had worked in process industries for thirty years, had never been 'stressed', and felt this was yet another irrelevant management fad. The unspoken implication was that anyone who did admit to feeling stressed must be a weak individual. So what are the facts?

In the early 1990s, UK Health and Safety Executive (HSE) research found that an estimated 183,000 workers believed they had suffered work-related stress, depression or anxiety in the preceding year, and over 50% of them believed their condition was *caused*, not merely made worse, by work.

The flip-side of stress is mental health. People are comfortable talking about the importance of physical health, its importance to performance and business success, and will spend time and money promoting it. For many people and organisations, the position with mental health is less clear. It is not widely appreciated that, for example, over 1 in 10 men and women will develop anxiety or depression which requires treatment during their lifetime. It is important to appreciate that mental health problems are common; they affect people like you, can be caused or exacerbated by work conditions or personal circumstances, are real, and can be managed.

Post-traumatic stress disorder (PTSD)

This is a different type of stress-related illness, typically caused by direct exposure to an extreme stressor involving actual or threatened death or serious injury. Symptoms include persistent re-experiencing of the traumatic event (flashbacks), avoidance of things associated with the traumatic event, and increased anxiety.

PTSD may be experienced by process industry personnel following an accident or incident.

Protocols which minimise the likelihood of PTSD occurring after an incident are recommended.

Recently The Keil Centre's clinical psychologists trained in a new technique for treating PTSD called Eye Movement Desensitisation and Reprocessing (EMDR). This technique helps to break the link between flashbacks and anxiety. Controlled trials and our own clinical experience indicate EMDR offers a higher rate of recovery within a shorter number of treatment sessions.

Although work-related stress has achieved media prominence in the last decade, it is not a new phenomenon. Stress, and stress at work, has been researched for the last 60 years, and there is considerable agreement that specific aspects of work context and content can be stressful (see Table 1). How many of us, at some time in our careers, have been placed under unreasonable pressure due to aspects of how our organisation was managed?

We are not aware of any evidence to suggest that process industries have a bigger problem with work-related stress than any other business sector — but neither are they immune.

It is worth remembering that the nature of work has changed significantly over the past twenty years. There has been a shift in emphasis from physically-demanding work towards a more demanding mental workload and complex patterns of business relationships. A corresponding shift in emphasis from physical to psychosocial workplace stressors would be expected.

More recently, three developments have combined to focus management attention on reducing risk associated with the topic of occupational stress. First, many industries have restructured their organisations, reduced manning levels and 'empowered' their employees by giving them greater responsibility, accountability and workload. In some cases this has resulted in reported increases in 'stress levels'. Second, HSE guidance on stress recommends that employers should assess and control risks to mental health in the workplace. Third, several court judgements have awarded damages to employees after their employers failed to prevent foreseeable adverse mental health consequences arising from work activities.

So what is stress, how can it be recognised, and what can be done about it?

The nature of stress

Stress is best regarded as a *perceived* imbalance between *demands* and *resources*. We can readily identify external *demands* made by employers, customers or family members to take on work and responsibilities, and to meet targets. We try to meet demands by deploying external *resources* such as our time, other people, and money. What is less well appreciated is the existence of internal demands and resources. We can demand perfection in our work when adequacy will do, and fail to develop and deploy self-confidence to meet challenges which are within our grasp. This is where the importance of how we perceive a situation emerges.

When demands and resources are roughly in balance, pressure results. Pressure is generally a positive experience. When too many (or too few) demands are made on available resources, stress can result, and performance suffers.

For those who need more convincing that stress is a complex phenomena with physical, mental and behavioural components, here are a few thought-provoking facts. First, one of the most effective treatments for anxiety and depression (typical consequences of prolonged stress) is drug therapy. The type of drugs used work by correcting imbalances in brain chemistry. This drug therapy can be enhanced by combining it with cognitive therapy, a 'talking cure', which teaches people how to manage the negative thoughts associated with stress. Giving people the mental and behavioural skills to manage such situa-

tions in the future reduces the probability of a relapse. Second, research shows that the long-term immune response of people in situations which everyone would agree are stressful (eg. caring for an elderly relative with dementia) is lowered. Hence when your granny said 'You are run-down, you'll catch a cold' there was some truth in this.

HSE's position on stress

Recent HSE guidance emphasises that although there is no specific legislation concerning stress at work, there are two pieces of legislation which are relevant:-

- employers have a duty under the Health and Safety at Work etc. Act 1974 to ensure, so far as is reasonably practicable, that their workplaces are safe and healthy; and
- under the Management of Health and Safety Regulations 1993, employers are obliged to assess the nature and scale of risks to health in their workplace and base their control measures on it.

Health and Safety Executive guidance clearly states that employer's duties apply equally to physical and mental health in the workplace, and that risk assessments should cover potential harm from workplace stressors. Guidance on this topic will be published by HSE in late summer 1998.

HSE guidance does not specify how a risk assessment on the topic of occupational stress should be conducted. The principles are no different from risk assessment in other contexts, namely:

- Look for the hazards
- Decide who might be harmed, and how
- Evaluate the risks arising from the hazards, and decide whether existing precautions are adequate or more should be done
- Take appropriate action
- Record findings
- Review assessment periodically and revise if necessary.

As the topic of stress is less tangible and more subjective than other risks in process industries, difficulty arises with identifying the hazards. This can be overcome by using a process of 'triangulation' to measure the extent and nature of the risks and hazards. Triangulation refers to using multiple methods and data sources to obtain a balanced view. For example, an organisation might conduct a risk assessment by conducting a stress audit using a standardised questionnaire, and supplement this by interviewing focus groups of employees. They might also seek the views of staff whose position which gives them a special insight, for example occupational health specialists, personnel staff or trade union representatives.

To illustrate the pitfalls of relying too heavily on one source of information, consider this example. A process industry HR manager recognised that a group of managers who were bearing the brunt of major organisational change were showing signs of stress-related illness. He acted quickly to address the

Table1: Work-related stressors

Potentially stressful aspects of work	Examples
Organisational function and culture	<ul style="list-style-type: none"> ● Ill-defined objectives ● Poor problem-solving and development environment ● Poor communication ● Non-supportive culture
Role in organisation	<ul style="list-style-type: none"> ● Role ambiguity ● Role conflict ● High responsibility for people
Career development	<ul style="list-style-type: none"> ● Career uncertainty and/or stagnation ● Low status and/or pay ● Job insecurity and redundancy ● Low social value of work
Decision latitude / control	<ul style="list-style-type: none"> ● Lack of opportunity to control work and participate in decision-making
Interpersonal relationships at work	<ul style="list-style-type: none"> ● Social or physical isolation ● Poor relationships with supervisors ● Interpersonal conflict and violence ● Lack of social support
Home / work interface	<ul style="list-style-type: none"> ● Conflicting demands of work and home ● Low support at home ● Dual career problems
Task design	<ul style="list-style-type: none"> ● Ill-defined work ● High uncertainty at work ● Lack of variety ● Fragmented or meaningless work ● Lack of opportunity to use skills ● Continual client/customer interface
Workload and work pace (amount and difficulty)	<ul style="list-style-type: none"> ● Lack of control over workload ● Work overload or underload ● High degree of urgency or time pressure
Work schedule	<ul style="list-style-type: none"> ● Shift working ● Inflexible work schedule ● Unpredictable work hours ● Long or unsociable work hours

(adapted from Cox, T. – see references)

problem in a professional manner. He gave his opinion of what the ten most important work-related stressors were for this group. Only one of these stressors was among the ten most important stressors identified by the group of managers themselves.

The aim of the risk assessment is to identify which, if any, sources of workplace stress apply to which groups of employees and what practical actions can be taken to eliminate these at source. In our experience, once the risk assessment has been completed, the practical things organisations should be doing boil down to good management practice. Involving staff in the process of risk assessment and providing feedback on results aids acceptance and implementation of recommendations.

Recent legal developments

Employment law experts also take the view that there is no reason why stress-induced illness should be treated differently from any other work-related disease or injury. In the United States during the 1980s, numerous claims were made against their Workers Compensation Scheme for work-related mental injury or trauma.

During the 1990s, a number of similar UK cases have been settled out of court. Also, a UK court held that, having considered the specific circumstances surrounding the case of a Northumberland social services officer named John Walker, his employer was liable for his nervous breakdown.

It seems that, to prevent being the subject of a successful stress-related personal injury claim, an employer must:

- identify all work-related risks to mental health which apply to specific groups of employees
- take such steps which are reasonable in the circumstances to protect the employees from harm.

There are three levels at which managers may intervene to tackle stress at work:

- Prevention — by tackling causes of work-related stress at source
- Management — by developing people's ability to cope with unavoidable stress
- Treatment — providing professional help for those who are not coping.

Until recently, most organisations that have addressed the topic of work-related stress have concentrated on management and treatment. These types of interventions are useful. However, they are essentially focused on the individual and do not also tackle the problem at source. A comprehensive approach would also include an assessment of those stressors which have the potential to harm the mental health of specific groups of employees (Table 1) and effects on individuals (Table 2).

How this works in practice is best illustrated by a real-life example. BP Chemicals' Grangemouth occupational health

For an American view, why not read...

Managing Employee Stress by Dan Petersen

192 pages/1990/hardback/ISBN 0 913690 21 X

Published by Aloray Inc and available from IChemE

Book Sales, Rugby or e-mail booksales@icheme.org.uk, at the special price of £10.00 (plus 5% postage in UK, 10% elsewhere).

department provides treatment for employees with stress-related illnesses, caused by a variety of personal and work circumstances. Recently, occupational health staff noticed a trend emerging. The profile of individuals they saw and the work-related problems reported which were suggestive of wider organisational issues. Senior management decided that prevention was better than cure, and commissioned an independent review of potential sources of occupational stress. This review was conducted by involving a cross-section of employees in stress focus groups, facilitated by an experienced psychologist. The focus groups identified and prioritised six practical actions which were endorsed and acted upon by management. One of these actions was to design and implement a stress education programme, so all staff possess the management skills to understand the nature of stress, its relevance to the business, how to recognise it, and what resources the company can offer if required.

Conclusion

Work-related stress is no different in principle from other business risks. There is considerable agreement between management, psychological and legal perspectives on best practice. There are practical steps which can be taken to control work-related stress. A comprehensive approach is required which includes prevention, management and treatment. Such an approach promotes mental health, minimises adverse consequences for employees and business performance, and addresses legal obligations.

Useful references

- *Stress Research and Stress Management: Putting Theory to Work*, Cox, T. HSE Contract Research Report No 61/1993.0
 - *Stress at Work, A guide for employers*, HSE Books Ref. HS(G) 116
 - *Stress and Employer Liability*, J Earnshaw and C Cooper, London: IPD
 - HSE has recently produced a resource pack for designing management training programmes: *Mental well-being in the workplace: a resource pack for management training and development*, price £25.00
 - Draft guidance aimed at small firms: *Help on work-related stress* will be available shortly.
- HSE Books can be contacted on tel. 44 1787 881165 fax 44 1787 313995.

Ronny Lardner is a chartered occupational psychologist with The Keil Centre, Edinburgh, a private practice of chartered occupational and clinical psychologists. He can be contacted on tel +44 131 667 8059, fax +44 131 667 7946, email ronny@keilcentre.co.uk

Bob Miles is a psychologist and chartered engineer. He is a human factors research manager with HSE's Offshore Safety Division, specialising in the areas of shiftwork, safety culture and safety management. He can be contacted on tel +44 171 717 6685, e-mail bob.miles@hse.gov.uk

Table 2 - Some effects of stress

Rather than being 'all in the mind', stress has effects on the body, mind and behaviour. These are summarised below:

Effects on the body

- Headaches
- Insomnia
- Dizziness
- Blurred vision
- Difficulty swallowing
- Muscle tension
- Digestive problems
- Tremors and shakiness

Effects on the mind

- Feelings of threat and apprehension
- Repetitive and intrusive thoughts
- Lowered concentration, confidence and mood
- Problems with memory and decision-making

Effects on behaviour

- Substance abuse (e.g. alcohol, drugs)
- Reduced exercise
- Irritability, easily startled
- Social withdrawal