

Stress at Work Management and Prevention

Jeremy Stranks



Management and Prevention

This page intentionally left blank

Management and Prevention

Jeremy Stranks



AMSTERDAM BOSTON HEIDELBERG LONDON NEW YORK OXFORD PARIS SAN DIEGO SAN FRANCISCO SINGAPORE SYDNEY TOKYO

Elsevier Butterworth-Heinemann Linacre House, Jordan Hill, Oxford OX2 8DP 30 Corporate Drive, Burlington, MA 01803

First published 2005

Copyright © 2005, Jeremy Stranks. All rights reserved

The right of Jeremy Stranks to be identified as the author of this work has been asserted in accordance with the Copyright, Designs and Patents Act 1988

No part of this publication may be reproduced in any material form (including photocopying or storing in any medium by electronic means and whether or not transiently or incidentally to some other use of this publication) without the written permission of the copyright holder except in accordance with the provisions of the Copyright, Designs and Patents Act 1988 or under the terms of a licence issued by the Copyright Licensing Agency Ltd, 90 Tottenham Court Road, London, England W1T 4LP. Applications for the copyright holder's written permission to reproduce any part of this publication should be addressed to the publisher

Permissions may be sought directly from Elsevier's Science & Technology Rights Department in Oxford, UK: phone: (+44) 1865 843830, fax: (+44) 1865 853333, e-mail: permissions@elsevier.co.uk. You may also complete your request on-line via the Elsevier homepage (http://www.elsevier.com), by selecting 'Customer Support' and then'Obtaining Permissions'

British Library Cataloguing in Publication Data

A catalogue record for this book is available from the British Library

Library of Congress Cataloguing in Publication Data

A catalogue record for this book is available from the Library of Congress

ISBN 0 7506 6542 4

For information on all Elsevier Butterworth-Heinemann publications visit our website at http://books.elsevier.com

Typeset by Charon Tec Pvt. Ltd, Chennai, India www.charontec.com Printed and bound in Great Britain by Biddles Ltd, King's Lynn, Norfolk



Contents

Preface			ix
1.	Intro	duction to stress	1
	1.1	What is stress?	1
	1.2	Defining stress	2
	1.3	Degradation of human performance	3
	1.4	The evidence of stress	4
	1.5	Stress as opposed to pressure	5
	1.6	The cost of stress	5
	1.7	The response of the courts to stress	6
	1.8	The physiology of stress	7
	1.9	A model of human performance and stress	11
	1.10	The effects of stress	11
		Occupational groups	13
	1.12	Conclusion	14
-		to ask yourself after reading this chapter	14
Key	points	 implications for employers 	15
2.	The c	causes of stress	16
	2.1	Classification of the causes of stress at work	16
	2.2	Factors contributing to stress at work	20
	2.3	Categorizing the causes of stress	20
	2.4	The main sources of work stress	21
	2.5	Recognizing stress in the workplace	21
	2.6	Stress within the organization	22
	2.7	Organizational culture and change	24
	2.8	Stress in the work group	27
	2.9	Shift workers and other atypical workers	27
	2.10	The home–work interface	31
	2.11	Reducing stress at organizational level	31
	2.12	Violence, bullying and harassment at work	32

vi **Contents**

2.13	3 Violence management	37
2.14		39
Question	s to ask yourself after reading this chapter	40
Key poin	ts – implications for employers	40
3. Res	ponses to stress	41
3.	Symptoms of stress	41
3.2	2 Responses to prolonged stress	41
3.3	3 The stages of the stress response	42
3.4	4 Stress indicators	42
3.5	5 The effects of stress on job performance	44
3.0	5 1	44
3.1		48
3.8	8 Personality and stress	49
3.9	9 Submission, assertion and aggression	50
3.10		52
	Alcohol misuse	53
	2 Drug misuse and addiction	57
3.13	3 Women at work	60
3.14		62
	s to ask yourself after reading this chapter	62
Key poin	ts – implications for employers	63
4. The	e evaluation of stress	64
4.		64
4.2	2 Stress levels in occupations	65
4.		66
	s to ask yourself after reading this chapter	66
Key poin	ts – implications for employers	66
5. Coj	bing with stress	67
5.	1 Responding to stress	67
	2 Personal coping strategies	69
5.	3 Change management and stress	70
	4 Organizational change	72
5.	5 Personal change	73
5.	e	75
5.	•	75
5.	•	77
5.		78
5.1	1.	78
5.1		79
5.1	5	80
5.1		80
	s to ask yourself after reading this chapter	81
Key poin	ts – implications for employers	81

6.	Stress	in the workplace	82
	6.1	Advice to employers	82
	6.2	Strategies for reducing stress	83
	6.3	Recognizing stress in the workplace	85
	6.4	The need to consider human factors	86
	6.5	Human behaviour and stress	87
	6.6	Mentally and physically challenged employees	108
	6.7	Workplace indicators of stress	109
	6.8	Stress in groups	109
	6.9	The sources of management stress: HSE guidance note HS(G)48	110
	6.10	Stress and the potential for human error	111
	6.11	Conclusion	111
Que	stions to	o ask yourself after reading this chapter	112
Key	points -	- implications for employers	112
7.	Mana	aing strong at work	113
7.	7.1	ging stress at work Employers' responsibilities and duties in relation to stress	113
	7.1		115
	7.2	Duties of senior management: The human factors-related approach	115
	7.3 7.4	Human factors and the need to manage stress Developing a strategy	117
	7.4	Strategies for managing stress	117
	7.5 7.6	HSE management standards	118
	7.0	Teamworking	122
	7.7	•	122
	7.8 7.9	Decision-making and stress	123
	7.9 7.10	The work setting	123
		Information, instruction and training	
	7.11	Communicating change	124
	7.12	Creating a healthy workplace	125
	7.13	Health promotion arrangements: Organizational interventions	126
	7.14	Health surveillance arrangements	128
	7.15	Personal stress questionnaire	128
	7.16	Work-related stress risk assessment	130
	7.17	Ergonomics and stress	135
	7.18	Job design and organization	137
	7.19	Stress management programmes	139
	7.20	Occupational health schemes and services	140
	7.21	Remedies for employers	140
	7.22	FIET recommendations on limitations of work-related stress and	142
	7 22	pressure affecting salaried employees	143
	7.23	Termination of employment for work-related stress	144
	7.24	Stress management action plans	145
	7.25	A corporate fitness programme	149
	7.26	EU principles of stress prevention	150
0	7.27	Conclusion	151
		o ask yourself after reading this chapter	151
Key points – implications for employers 152			

8.	The c	civil implications	153
	8.1	The landmark case	153
	8.2	Principal areas of consideration	156
	8.3	Court of Appeal guidelines: Employers' obligations	161
	8.4	Linking stress to the workplace	161
	8.5	Recent cases	162
	8.6	Practical propositions	167
	8.7	Violence, harassment and bullying at work	169
	8.8	Court of Appeal general guidelines	170
	8.9 8.10	Establishing stress-induced injury Liability for psychiatric illness	171 171
	8.10	The remedies for employers	171
	8.12	A corporate strategy	172
	8.13		174
Oue		to ask yourself after reading this chapter	174
		– implications for employers	174
•	-		
9.		riminal implications	176
	9.1 9.2	Health and Safety at Work etc. Act 1974 (HSWA) What is health?	176 177
	9.2 9.3	Management of Health and Safety at Work Regulations 1999	1//
	9.5	(MHSWR)	177
	9.4	Management of Health and Safety at Work and Fire Precautions	1//
	2.1	(Workplace) (Amendment) Regulations 2003	179
	9.5	HSE stress questionnaire	180
	9.6	Stress and risk assessment	180
	9.7	Health and Safety (Display Screen Equipment) Regulations 1992	184
	9.8	The criminal implications of violence, bullying and harassment	190
	9.9	Whistle blowing	198
	9.10	Home working and stress	199
	9.11	Disability Discrimination Act 1995	200
	9.12	Disability arising from mental impairment	205
	9.13	Employment tribunals and stress	206
		HSE research reports	209
		HSE management standards Conclusion	210
0	9.16		210 211
		o ask yourself after reading this chapter – implications for employers	211
•	•	1 1 2	
Арр		Stress audit	213
		rtaking the audit	213
		is stress?	213
	Actio	n plan	217
10.	Exec	utive summary	219
Bibl	Bibliography and further reading		222
Inde	Index		

Preface

People at work worry about all sorts of things – increasing competition for jobs, globalization, terrorism, 'rationalization' of the organization's operations, looking after ageing parents and relatives, the threat of redundancy, annual appraisals, new technology, outsourcing of jobs to India and other Third World countries together with increased demands by employers for higher productivity. Moreover, they may be put under excessive pressure at certain times, for example, to meet sales targets, attend meetings on time, learn and follow new procedures and fit in with changes in the organization's culture. This can result in varying levels of stress. According to the Health and Safety Executive, workplace stress is now the fastest growing cause of absence from work.

What sort of employer are you? When your employees complain of stressful conditions at work, do you reply with the old maxim 'If you can't stand the heat, get out of the kitchen!'? The days when such a response from employers was common are over. Employers now need to get to grips with a range of policies and procedures to deal with stress at work.

What is important is that the poor standards of performance by many employees due to the effects of stress at work represent a substantial financial loss to their organizations and the British economy. Moreover, recent cases in the civil courts, and the greater attention now being paid to the subject of stress at work by the enforcement agencies, means that employers need to consider stress in the workplace and the measures they must take to prevent employees suffering stress arising from their work. It is not uncommon for six figure sums to be awarded as damages in civil claims for stress-induced injury.

This book has been written as a guide for managers. It should enable them to understand the meaning of stress, the causes of stress, human responses to stress and aspects of behaviour which are significant in this area. In particular, employers need to manage stress by incorporating stress protection for their employees into their management systems.

x Preface

The book incorporates a number of important features, including a stress audit, the recent Court of Appeal general guidelines with respect to civil claims for stress-related ill health, measures necessary with respect to bullying and harassment and procedures for bringing stress management into operating procedures.

I would like to thank Dr Jacques Tamin of Interact Health Management for contributing the work-related stress (WRS) risk assessments.

> Jeremy Stranks August 2004

Introduction to stress

The recent civil court decision in which a senior social worker was awarded $\pounds 175\,000$ compensation against his local authority employer for allowing him to work to the point of breakdown raises the question as to whether claims for stress at work will be the significant legal issue of the next decade.

Other claims have followed, including the claim involving a ticket collector who received £375 000 in damages for post-traumatic stress disorder as a result of the King's Cross station fire.

Stress at work, and the potential for stress-induced ill health, has become a topical subject with many people. Furthermore, most people can describe stressful events and circumstances at work. Inefficient management, lack of decision-making by management, excessive working hours, uncertainty as to future employment prospects and the pressure of the job are some of the causes of stress described by employees.

1.1 What is stress?

'Stress' is a word which is rarely clearly understood and there is no single definition of the term. It means different things to different people. Indeed, almost anything anyone can think of, pleasant or unpleasant, has been described as a source of stress, such as getting married, being made redundant, getting older, getting a job, too much or too little work, solitary confinement or exposure to excessive noise.

Stress can be defined in many ways, thus:

- The common response to attack (Selye, 1936);
- Any influence that disturbs the natural equilibrium of the living body;
- Some taxation of the body's resources in order to respond to some environmental circumstance;
- The common response to environmental change;

- A psychological response which follows failure to cope with problems;
- A feeling of sustained anxiety which, over a period of time, leads to disease;
- The non-specific response of the body to any demands made upon it.

The CBI defines stress as that which arises when the pressures placed upon an individual exceed the perceived capacity of that individual to cope.

According to the TUC, stress occurs where demands made on individuals do not match the resources available or meet the individual's needs and motivation. Stress will arise if the workload is too large for the number of workers and time available. Equally, a boring or repetitive task which does not use the potential skills and experience of some individuals will cause them stress.

The Health and Safety Executive (HSE) (1995) defined work stress as 'pressure and extreme demands placed on a person beyond his ability to cope'. In 1999, the Health and Safety Commission (HSC) stated that 'stress is the reaction that people have to excessive pressures or other types of demand placed upon them'.

According to Cox (1993), 'stress is now understood as a psychological state that results from people's perceptions of an imbalance between job demands and their abilities to cope with those demands'.

A further definition is 'work stress is a psychological state which can cause an individual to behave dysfunctionally at work and results from people's response to an imbalance between job demands and their abilities to cope'.

Fundamentally, workplace stress arises when people try to cope with tasks, responsibilities or other forms of pressure connected with their jobs, but encounter difficulty, strain, anxiety and worry in endeavouring to cope.

1.2 Defining stress

A consideration of the above definitions of 'stress' produces a number of features of stress and the stress response, for example, disturbance of the natural equilibrium, taxation of the body's resources, failure to cope, sustained anxiety, a non-specific response, pressure and extreme demands and imbalance between job demands and coping ability.

Fundamentally, a stressor (or source of stress) produces stress which, in turn, produces a stress response on the part of the individual. No two people respond to the same stressor in the same way or to the same extent. What is important is that, if people are going to cope satisfactorily with the stress in their lives, they must recognize:

- The existence of stress;
- Their personal stress response, such as insomnia or digestive disorder;
- Those events or circumstances which produce that stress response, such as dealing with aggressive clients, preparing to go on holiday or disciplining employees;
- Their own personal coping strategy, such as relaxation therapy.

1.3 Degradation of human performance

Human performance is directly affected by the environment in which people work and sound levels of working environment promote optimum levels of performance. Many factors influence the human system and performance can degrade as a result of a wide range of stressors, and in some cases the system breaks down.

Degradation of performance is particularly associated with the following stressors.

1.3.1 Diurnal (circadian) rhythm

Body rhythms tend to follow a cyclical pattern linked to the 24-h light–dark cycle and sleeping–waking cycle, that is diurnal rhythm. Interruptions in this rhythm, as experienced by, for example, casual workers, shift workers and night workers, can cause stress on operators resulting in reduced operational performance as much as 10 per cent below average performance.

In the case of night workers, adjustment may take place after 2–3 days and goes on increasing up to a period of approximately 14 days provided that the individual continues both to live and work on a night-time schedule, and does not return to normal daytime living at weekends.

Rotating shift patterns, for example, a week on night work followed by a week on day work, or the operation of 12-h shifts rotating from, for instance 6 a.m. to 6 p.m., noon to midnight and 6 p.m. to 6 a.m. on different weeks, can result in high levels of stress on operators and their families.

1.3.2 Fatigue

Fatigue commonly results from working excessive hours without rest breaks and adequate periods of sleep.

1.3.3 Lack of motivation

Where there is no stimulation from management in terms of performance targets and the rewarding of employees for achieving these targets, employees rapidly become demotivated and their performance deteriorates.

1.3.4 Lack of stimulation

Many jobs are boring, repetitive and demotivating resulting in a lowered level of arousal on the part of operators. Stimulation of performance can be achieved by job rotation, productivity bonus schemes (provided the rewards are seen to be fair to all

concerned), working in small teams and, in certain cases, counselling of employees in an endeavour to reduce stress.

1.3.5 Stress

As stated above, a stressor causes stress. Stress is commonly associated with how well or badly people cope with changes in their lives – at home, within the family, at work or in social situations. As will be seen in Chapter 2, the causes are diverse, but include:

- Environmental stressors, such as those arising from extremes of temperature and humidity, inadequate lighting and ventilation, noise and vibration and the presence of airborne contaminants, such as dusts, fumes and gases;
- Occupational stressors, associated with too much or too little work, overpromotion or under-promotion, conflicting job demands, incompetent superiors, working excessive hours and interactions between work and family commitments; and
- Social stressors, namely those stressors associated with family life, marital relationships, bereavement, that is, the everyday problems of coping with life.

1.4 The evidence of stress

Research in the 1990s by Professor Cox of Nottingham University led to much of the HSE's current guidance on the subject. Following an independent review of the literature, Professor Cox indicated that there was a reasonable consensus from the literature on psychosocial hazards (or stressors) arising from work which may be experienced as stressful or otherwise, and that these stressors may carry the potential for harm. According to the research there are nine characteristics of jobs, work environments and organizations which were identified as being associated with the feeling of stress and which could damage or impair health.

These characteristics are of two types, context or setting and nature:

- 1. The context or setting in which the work takes place, i.e.:
 - organizational function and culture
 - career development
 - decision latitude/control
 - role in organization
 - interpersonal relationships
 - the work/home interface.
- 2. The content or 'nature' of the job itself, in particular:
 - task design
 - workload or work pace
 - work schedule.

Further research released by the HSE gives an indication of the scale of the problem of injuries which are stress-related. In the report *The Scale of Occupational*

Stress: The Bristol Stress and Health at Work Study CRR 265/2000 (Smith et al., 2000), it was estimated that there are 5 million workers suffering from high levels of stress at work. Important outcomes of this study were:

- Approximately one in five workers reported high levels of stress arising from work.
- There was an association between high levels of reported stress and specific job factors such as excessive workloads or lack of managerial support.
- There was an association between high levels of reported stress and certain aspects of ill health, such as poor mental health and back pain, together with certain health-related activities such as smoking and excessive alcohol intake.

What came out of this study is that stress is now a foreseeable cause of ill health and that employers need to take this factor into account when considering the means for reducing the running costs of the undertaking.

1.5 Stress as opposed to pressure

Not all stress, however, is bad for people. Most people need a certain level of positive stress or pressure in order to perform well the tasks allotted to them. Some people are capable of dealing with very high levels of positive pressure. This is the classic fight response or 'butterfly feeling' that people encounter before sitting an examination, running a race or attending a job interview.

Positive stress is one of the outcomes of competent management and mature leadership where everyone works together and their efforts are valued and supported. It enhances well-being and can be harnessed to improve overall performance and fuel achievement.

It is the negative stress, or distress, such as that arising from having to meet set deadlines or delegate responsibility, commonly leading to ill health, that needs to be considered by employers as part of a stress management strategy. It may be the result of a bullying culture within the organization where threat, coercion and fear substitute for non-existent management skills. With this sort of culture, employees have to work twice as hard to achieve half as much to compensate for the dysfunctional and inefficient management. Negative stress diminishes quality of life and causes injury to health resulting in a range of stress-related symptoms.

1.6 The cost of stress

In recent years organizations such as the CBI, TUC, Department of Health and the HSE, together with an increasing number of both large and small employers, have expressed concern about the increasing costs of stress at work, not only in human and financial terms, but to the national economy generally.

Early studies into the cost of stress at work identified a number of important points with respect to the cost of stress at work.

- Stress is said to cost British industry approximately 3 per cent of the gross national product.
- Stress-related costs amount to more than 10 times the cost of all industrial disputes.
- Stress-related illness directly causes the loss of 40 million working days each year.

The cost of replacing an employee who is underperforming owing to stress is between 50 and 90 per cent of his annual salary (Personnel Management, Factsheet 7, July 1988). More recently, in the HSE report *Mental Health and Stress in the Workplace: A Guide for Employers* (1996), it was estimated that 360 million working days were lost annually in the UK at a cost of £8 billion, and that half of these absences were stress-related. Moreover, the pilot results of a national survey into stress at work, originally launched in 1997 by the University of Bristol on behalf of the HSE, revealed that every day 270 000 people are absent from work with a stress-related illness.

The CBI estimates that stress and stress-related illness cost UK industry and taxpayers £12 billion each year. The UK Department of Health state that 3.6 per cent of national average salary budget is paid to employees off sick with stress. In fact, stress is now officially the prime cause of sickness absence, although 20 per cent of employers still do not regard stress as a health issue.

1.7 The response of the courts to stress

Employers should not only be concerned about the problems of reduced productivity and absenteeism associated with stress, however. What is of particular concern is the dramatically increased attention to stress being given by the courts and enforcement agencies. In fact, stress-related injury has been described as 'the civil claim of the millennium'. *Walker v Northumberland County Council* (1995) was the landmark case in the civil courts focusing attention on the subject of work-related stress for the first time. In this case, Walker, who was a social worker, suffered two nervous breakdowns due to stress and overwork. He subsequently sued his employers, Northumberland County Council, and was awarded £175 000 in damages. The total costs of this case, however, were nearly £500 000 when legal costs, sick pay and pension were taken into account.

Since this case, there has been an approximately 90 per cent increase in civil claims for mental and physiological damage. Further stress-related claims are dealt with in Chapter 8.

It is significant that the HSE has taken the issue of stress at work on board in recent years resulting in a range of publications on the subject directed at employers with a view to reducing stress at work. The criminal implications of stress at work could be expensive for employers in future years in terms of fines in the criminal courts. A number of questions need to be asked in this case with respect to the criminal liability of employers.

- What will be the response of the enforcement agencies to complaints from employees of stress at work?
- Is it likely that an employer could be served with an improvement notice under the Health and Safety at Work Act to, for example, install a stress management programme in his organization?

- Are employers likely to be prosecuted where there is evidence of stress amongst employees?
- Who will be the experts in determining, firstly, whether an employee is suffering stress-related ill health and, secondly, predicting the short-, medium- and long-term effects of that stress?
- Is it conceivable that, in years to come, stress at work regulations will be brought out laying down requirements and procedures for employers on this matter?

1.8 The physiology of stress

Stress could be defined simply as the rate of wear and tear on the body systems caused by life. The acknowledged father of stress research, Dr Hans Selye, a Vienna-born endocrinologist of the University of Montreal, in his book *The Stress of Life* corrected several notions relating to stress, in particular:

- Stress is not nervous tension.
- Stress is not the discharge of hormones from the adrenal glands. The common association of adrenalin with stress is not totally false, but the two are only indirectly associated.
- Stress is not simply the influence of some negative occurrence. Stress can be caused by quite ordinary and even positive events, such as a passionate kiss.
- Stress is not an entirely bad event. We all need a certain amount of stimulation in life and most people can thrive on some forms of stress.
- Stress does not cause the body's alarm reaction, which is the most common misuse of the expression. What causes the stress reaction or response is a stressor.

A number of common factors emerge from the definitions of stress outlined earlier and the above comments. Fundamentally, stress is a state manifested by a specific syndrome of biological events. Specific changes occur in the biological system, but they are caused by such a variety of agents that stress is, of necessity, non-specifically induced.

Some stress response, however, will result from any stimulus. Quite simply, a stressor produces stress. Stressors may be of an environmental nature such as extremes of temperature and lighting, noise and vibration (environmental stressors). Stress may be induced by isolation, rejection, change within the organization or the feeling that one has been badly treated (social stressors). Thirdly, stress can be viewed as a general overloading of the body systems (distress).

1.8.1 The autonomic system

Stress has a direct association with the autonomic system which controls an individual's physiological and psychological responses. This is the flight or fight syndrome, characterized by two sets of nerves, the sympathetic and parasympathetic, which are responsible for the automatic and unconscious regulation of body function.

Parasympathetic state	Sympathetic state
Eyes closed	Eyes open
Pupils small	Pupils enlarged
Nasal mucus increased	Nasal mucus decreased
Saliva produced	Dry mouth
Breathing slow	Breathing rapid
Heart rate slow	Heart rate rapid
Heart output decreased	Heart output increased
Surface blood vessels dilated	Surface blood vessels constricted
Skin hairs normal	Skin hairs erect (goose flesh)
Dry skin	Sweating
Digestion increased	Digestion slowed
Muscles relaxed	Muscles tense
Slow metabolism	Increased metabolism

Table 1.1 Sympathetic and parasympathetic balance

The sympathetic system is concerned with answering the body's call to fight, i.e. increased heart rate, more blood to the organs, stimulation of sweat glands and the tiny muscles at the roots of the hairs, dilation of the pupils, suppression of the digestive organs, accompanied by the release of adrenalin and noradrenalin.

The parasympathetic system, on the other hand, is responsible for emotions and protection of the body, which have their physical expression in reflexes, such as widening of the pupils, sweating, quickened pulse, blushing, blanching, digestive disturbance, etc.

The balance between the sympathetic and parasympathetic systems is shown in Table 1.1.

1.8.2 The general adaptation syndrome

Stress is a mobilization of the body's defences, an ancient biochemical survival mechanism perfected during the evolutionary process, allowing human beings to adapt to threatening circumstances. In 1936, Selye defined this 'general adaptation syndrome' which comprises three stages.

- The alarm reaction stage. This is typified by receiving a shock, at the time when the body's defences are down followed by a counter-shock, when the defences are raised. In physiological terms, once a stressor is recognized, the brain sends out a biochemical messenger to the pituitary gland which secretes adrenocorticotrophic hormone (ACTH). ACTH causes the adrenal glands to secrete corticoids, such as adrenalin. The result is a general call to arms of the body's systems.
- 2. **The resistance stage**. This stage is concerned with two responses. The body will either resist the stressor or adapt to the effects of the stressor. It is the opposite of the alarm reaction stage, whose characteristic physiology fades and disperses as the organism adapts to the derangement caused by the stressor.
- 3. The exhaustion stage. If the stressor continues to act on the body, however, this acquired adaptation is eventually lost and a state of overloading is reached.

The response	What happens	The effect
Flight or fight	Red alert, body and brain prepare for action; extra energy released	Response to danger, meet it and return equilibrium
Secondary	Fats, sugars and corticosteroids released for more energy	Unless extra fats etc. used up, then third stage moved into
Exhaustion	Energy stores used up	Serious illness leading to death

Table 1.2 The stress response

The symptoms of the initial alarm reaction stage return and, if the stress is unduly prolonged, the wear and tear will result in damage to a local area or the death of the organism as a whole.

The three stages of the stress response can be summarized as shown in Table 1.2.

1.8.3 Selye's model

Selye's model illustrating the general adaptation syndrome is shown in Figure 1.1. This model shows the individual surrounded by a variety of stressors. His response to these stressors is affected by factors such as his strength of constitution, psychological strength, degree of control over the situation and how he actually perceives the potentially stressful event.

The effect of these stressors is to require some form of general adaptation by the individual. Here the situation can go one of two ways. If the individual adapts unsuccessfully, this leads to further wear and tear on the mind and body, general weakness and stress-related illness. This, in turn leads to increased vulnerability to further stressors in his life. Successful adaptation, on the other hand, leads to growth, happiness, security and strength, with greater resistance to further stressors.

No two people respond to the same stressor in the same way. However, in the majority of cases, exposure to a stressor will produce some form of personal stress response. This stress response could be digestive disorder, irritability or raised heart rate. Insomnia is a classic manifestation of stress.

Similarly, different people are affected by different stressors, such as boredom at work, the introduction of new technology or their lack of career development. For some people, stress may be created by trying to satisfy the demands of work and, at the same time, the demands of a young family, the classic 'home–work interface'.

What comes out of Selye's model is the fact that people need, firstly, to recognize those situations, circumstances and events that create a specific stress response in themselves, such as digestive disorders and increased respiration rate and, secondly, to develop their own personal strategies for coping with the particular stressors.

Fundamentally, this 'flight or fight' mechanism or stress response is designed for responding to physical danger, such as being chased by a lion. However, in the work

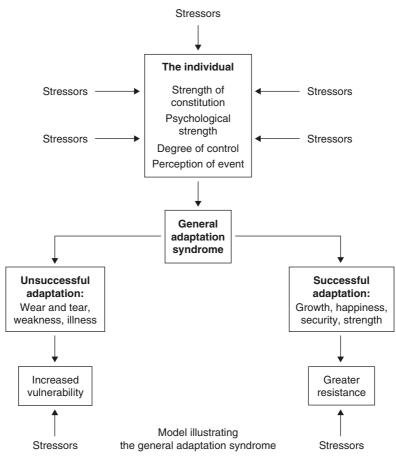


Figure 1.1 General adaptation syndrome.

situation, it is more likely to be set in motion by psychological danger, such as bullying or harassment by work colleagues or verbal and physical abuse. The stress response can also be activated in anticipation of adverse situations, such as loss of job, inability to pay a debt, being stopped by the police for exceeding a speed limit or being caught up in a road rage incident.

As stated previously no two people respond to the same stressor in the same way, and respond with differing degrees of stress. However, there are a number of factors which determine the level to which an individual will feel stressed:

- **Control**: A person will demonstrate stress to the extent to which they perceive they are not in control of a stressor. Generally, employees have no control over their employers.
- **Predictability**: A person will feel stressed due to the extent of his inability to predict the behaviour or occurrence of a stressor. Bullies, for example, are notoriously unpredictable in terms of what they are going to do next.

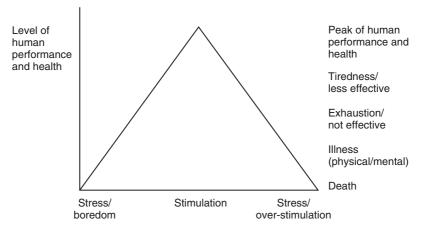


Figure 1.2 An adaptation of the human performance curve.

- Expectation: An individual will suffer stress to the extent to which he perceives his circumstances are still not getting better and will not get better. In this case, a bullying situation will inevitably deteriorate further.
- **Support**: A person will feel stressed to the extent to which he lacks support, including colleagues at work, managers, trade union representatives, family, friends, people in authority, his doctor and official organizations.

1.9 A model of human performance and stress

The model in Figure 1.2 demonstrates the significance of the 'human performance curve'. At the peak of the curve, the individual has reached his peak of performance and health. However, as a result of stress-related boredom or overstimulation, the level of human performance can deteriorate through a number of stages whereby the individual experiences tiredness and becomes less effective. A further stage is reached indicating exhaustion and a loss of effectiveness. This can eventually result in both physical and mental illness leading, in some cases, to death.

This model highlights lack of challenge as having similar effects to overstimulation, and that these effects can be progressive. It can also be used to raise the point that early recognition of the effects of stress can enable the individual to prevent their progression into ineffectiveness and ill health.

1.10 The effects of stress

Stress can have a significant effect, both on the individual and the organization.

1.10.1 Effects of stress on the individual

No two people necessarily manifest the same stress response. However, many of the outward signs of stress are readily recognizable. Stress fundamentally initiates a number of changes in body processes which are complex and involve several levels, such as:

- 1. Emotional: characterized by tiredness, anxiety and lack of motivation;
- 2. **Cognitive**: resulting in increased potential for error and, in some cases, accidents arising through error;
- 3. **Behavioural**: changes in behaviour resulting in poor or deteriorating relationships with colleagues, irritability, indecisiveness, absenteeism, smoking, excessive eating and alcohol consumption;
- 4. **Psychological**: the individual complains of increasing ill health associated with headaches, general aches and pains, and dizziness. These contribute to raised blood pressure, heart disease, a reduced resistance to infection, skin conditions and digestive disorders.

The HSE (2002) contract research report *Work Environment, Alcohol Consumption* and Ill Health, The Whitehall II Study CRR 422/2002 confirmed that a stressful working environment can lead to coronary heart disease, in most cases associated with ever-increasing job demands, poor levels of actual control over the job and an imbalance between the efforts made and the reward received. However, these effects were not necessarily related to conventional risk factors, such as smoking, high blood pressure and being overweight. Broadly, when people are subjected to changing workloads, resulting in higher demands being imposed, less direct control over the job and reduced support from management, their mental health deteriorated.

The report from the *Whitehall II Study* on the health of over 10 000 civil servants in the UK examined the influence of:

- 1. Job demands
- 2. The amount of influence employees have over how they do their work (job control)
- 3. The level of support from managers and colleagues
- 4. The effect on physical health of an imbalance in the effort people put into work and the rewards arising from same.

These factors are directly related to how stressful people find their work and could be applied to many other groups of workers. Previous reports have linked working conditions with heart disease, but this report gives a more clear and accurate assessment as, in this case, the participants' reports of heart disease were verified against their medical records.

1.10.2 Effects of stress on job performance

For people to perform well, they need interesting work, good working conditions, the chance to partake in the social surroundings of work and to feel valued.

Stressful work situations arising from, for example, the need for boring or repetitive work patterns, such as assembly work, poor physical working environments, isolated working situations, inadequate opportunities for communication between colleagues and continuous harassment from managers to meet deadlines can have direct effects on job performance. In particular, where people feel their contribution to the organization's success is undervalued, this can result in missed deadlines, poor productivity, ineffective decision-making by line managers and, in many cases, poor time keeping and absenteeism.

1.10.3 Effects of stress on the organization

Attitudes to stress amongst managers at all levels vary considerably. In some organizations, the culture can only be defined as 'aggressive'. Employees who complain about stress caused by excessive workloads may be greeted with the classic 'If you can't stand the heat, get out of the kitchen!' response from their immediate manager.

In many organizations, junior managers are expected to work long hours and undertake a range of projects and assignments in order to prove their worth to the organization. Furthermore, job and career reviews (appraisals) are intended to provide guidance to junior managers from senior management, to review current progress and to agree objectives, which are measurable and achievable, for future performance. Many job and career reviews, however, are badly conducted and can be stressful for employees, frequently resulting in stress arising from a feeling of unfairness, lack of understanding by their immediate manager and resentment.

Examples of how stress can affect an organization include:

- Increased complaints from clients;
- Employees losing commitment to the success of the organization;
- Increased accidents;
- Increased staff turnover;
- Increased levels of absenteeism;
- Reduced performance by the workforce; and
- A substantial increase in civil claims for stress-induced injury resulting in increased employers' liability insurance premiums.

Well-informed managers should recognize the signs of stress amongst employees at all levels. Failure to do this can have lasting adverse effects on the business, including low motivation, increased absenteeism, reduced productivity, faulty decision-making, poor industrial relations and reduced efficiency.

1.11 Occupational groups

Certain occupations have been shown to be more stressful than others. The HSE report (2002) *The Scale of Occupational Stress: A Further Analysis of the Impact of Demographic Factors and the Type of Job CRR 311*, indicates that the occupational groups

reporting high levels of occupational stress are, in order, teachers, nurses, managers, professional persons, other people involved in education and welfare (which includes social workers), road transport personnel and those involved in security operations, which includes police and prison officers.

Out of the above groups at least one in five reported high levels of stress. In the case of teachers, the figure was two in five. This research also showed that:

- 1. Full-time workers reported being more stressed than those in part-time work.
- 2. Those in managerial and technical posts reported being highly stressed, along with those educated to degree level and those earning in excess of £20 000 a year.
- 3. There was evidence of a racial element, although the numbers involved were small. Here non-white workers reported higher levels of stress than white workers.
- 4. There was little evidence of any significance of gender as there was little difference in reported levels between men and women.

1.12 Conclusion

Most people need a certain level of stress in order to perform well (positive stress). However, the benefits can rapidly turn to negative stress as a result of work overload situations, conflict situations in the workplace or the feeling of insecurity as a result of organizational changes.

How well or how badly people adapt to changes in their lives is a significant factor in the consideration of stress. As Selye demonstrated, for some people unsuccessful adaptation to change can have serious health effects. For others, successful adaptation brings growth, greater happiness and increased resistance to stress. In order to survive stressful events in their lives, people need to be more aware of stress, their personal stress responses and of strategies for coping with stress.

What is important is that organizations can no longer ignore evidence of stress amongst employees at all levels. Systems for managing stress and the strategies necessary for reducing same are covered in Chapters 6 and 7.

Questions to ask yourself after reading this chapter

- What is meant by 'stress'?
- What is the flight or fight response?
- How does the body's autonomic system operate?
- What are the various stages of the general adaptation syndrome?
- What are the effects of stress on the individual?
- Which occupational groups are most commonly exposed to stress?
- What is meant by positive stress?
- What are the effects of stress on the behavioural processes of people?
- What is the human performance curve?
- What are the functions of the body's sympathetic and parasympathetic systems?