8 | Job-related Stress and Burnout

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Occupational stress is a topic of substantial interest to organizational researchers and managers, as well as society at large. Stress arising from work conditions can be pervasive and significant in its impact on individuals, their families and organizations. There is also a widespread belief that management of job stress is a key factor for enhancing individual performance on the job, hence increasing organizational effectiveness. Sethi and Schuler (1984) outlined four major reasons why job stress and coping have become prominent issues: (a) concern for individual employee health and well-being; (b) the financial impact on organizations (including days lost due to stress-related illness); (c) organizational effectiveness; and (d) legal obligations on employers to provide safe and healthy working environments.

The costs of occupational stress to business and industry are well documented. According to recent research conducted by the International Labour Organization (cited by Olson, 2000), one in ten workers globally suffer from stress, anxiety and depression on the job, and job-related stress costs employers in Europe and the US more than $120 billion annually. In the European Union, up to 4 per cent of gross national product is spent on work-related mental health problems, and in the US job stress accounts for 200 million lost working days each year. Similarly, in the UK the Confederation of British Industry's sickness absence survey for 2000 revealed that workplace stress was the second most frequent cause of sickness absence, costing roughly about £4 billion per annum. While some degree of stress is probably desirable, since it may stimulate people to perform at higher levels, excessive stress can lead to a variety of psychological and physical health problems (Fletcher, 1988), as well as

impeding work productivity, causing accidents, and increasing absentee-ism and turnover (Ganster and Schaubroeck, 1991).

In this chapter we overview some key issues concerning the develop-ment and management of job stress and burnout. We begin by defining concepts used to describe stress and burnout. We then present a theoreti-cal model of the stress process, and overview some methods of assessing work-related stress and burnout. This leads to a discussion of both the sources and outcomes of stress and burnout, and some factors which may 'buffer' the effects of occupational stress. Finally, we examine procedures which organizations might utilize to alleviate stress and burnout among their employees.

WHAT IS STRESS?

In one of the earliest systematic attempts to define stress, Selye (1936) characterized it as a non-specific outcome (either physical or psychologi-cal) of any demand made upon the organism. He also described the response an organism makes as the *General Adaptation Syndrome* or stress response. Unfortunately, despite the wealth of research conducted to understand stress phenomena, there is still considerable confusion over the actual meaning of 'stress', which is reflected in the various ways in which it has been defined. Figure 8.1 presents a working definition of relevant concepts.

Beehr and Franz (1987) commented that stress 'has commonly been defined in one of three ways: as an environmental stimulus often described as a force applied to the individual, as an individual's psychological or physical response to such an environmental force, or as the interaction between these two events' (p. 6). Researchers agree that the term 'stressor' refers to the environmental stimulus or event, and that the term 'strain' refers to the person's response to the stimulus or event. Stressors, there-fore, are the antecedents and strain is the consequence of a stressful transaction. We agree with Beehr's (1987) suggestion that the term 'stress' be used to denote the general process linking stressors, strain and coping, rather than to describe specific elements.

In the early 1950s Lazarus, Deese and Osler (1952) initiated an influential line of research on stress and coping which led to the development of a
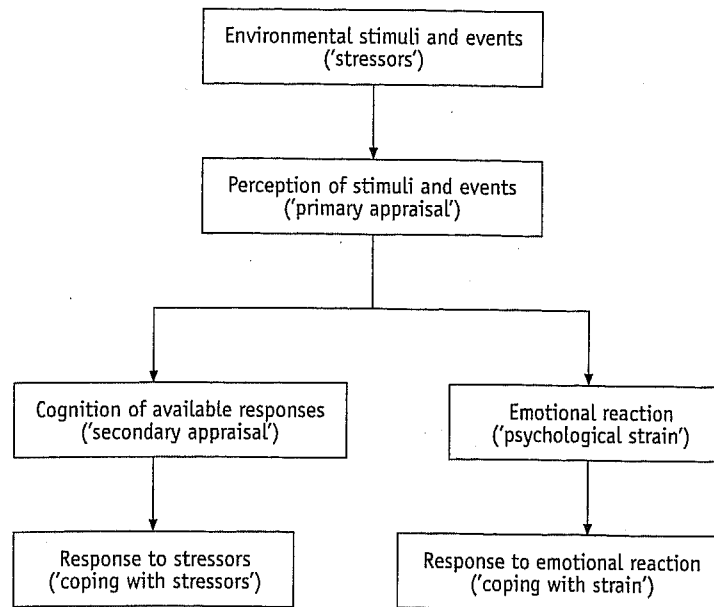
Fig. 8.1 Variables in the stress-coping process

comprehensive model depicting stress as a *transaction* process between the individual and the environment. This perspective views stress as arising from environmental demands which exceed a person's resources and capacity, when the outcomes are important for the person. This recognition of the interaction between the individual and the environment was formalized in the person–environment (P–E) fit model of stress developed by French, Caplan and Harrison (1982). In their view, 'strain can result from the mismatch between the person and the environment on dimensions important to the well-being of the individual' (p. 58). French *et al.* (1982) described the relationship between P–E misfit and strain as a U-shaped curve (Figure 8.2). For each individual's capabilities there are optimal levels of environmental demands. When these optimal levels are reached, strain will be minimal; with too little or too much demand, strain increases.

Today there is widespread acceptance of the notion that strain is jointly determined by environmental factors and characteristics of the
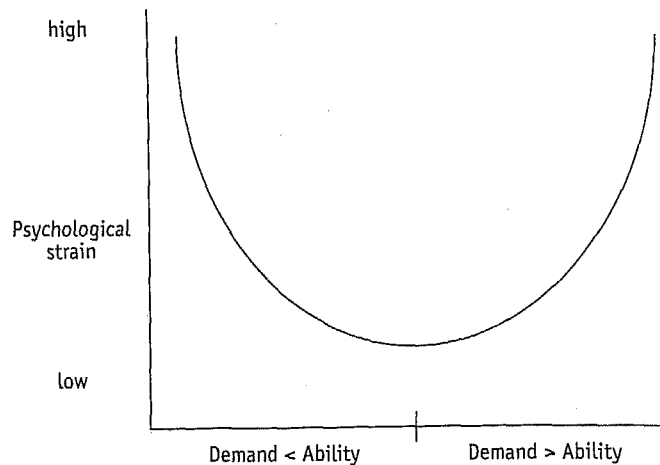
Psychological
strain

low

Demand < Ability   Demand > Ability

Fig. 8.2 The person–environment fit model of psychological strain (adapted from French, Caplan and Harrison, 1982, p. 29, with permission from J. Wiley and Sons)

person. Lazarus and Folkman (1984) argued that strain occurs when environmental demands or constraints are judged by the individual to exceed his or her resources or capacities. The critical variable is *cognitive appraisal*, of which there are three types: primary, secondary, and re-appraisal. Primary appraisal occurs when the person evaluates the signifi-cance of an environmental demand or event for his or her well-being: does the environment threaten well-being (physical or psychological)? Secondary appraisal follows, when the person assesses how he/she can deal with the situation: what coping behaviours can be utilized to reduce stress? Finally, reappraisal entails an evaluation of whether or not attempts at coping have been successful. This formulation is important because it focuses attention on processes of coping with stress, which we discuss later.

Another general model of the stress process is the cybernetic (or control) theory articulated by Edwards (1998), which extends concepts implicit in earlier approaches. The cybernetic theory is illustrated in Figure 8.3. It postulates that stress not only has an impact on individual well-being, but also stimulates coping responses, which in turn affect the original sources of strain. For example, in a work environment a person may be experiencing role ambiguity (lack of clarity in task goals or

procedures). In response to this, the employee might approach the supervisor to seek clarification of his or her duties. Not only does this behaviour reduce the immediate uncertainty experienced, but it may also change the supervisor's behaviour such that the source of ambiguity is removed (e.g., the supervisor may provide clearer directions for the subordinate).

One specific form of strain which has received considerable attention in recent years is *burnout*, which may be defined as an extreme form of strain experienced under certain conditions, particularly when the person is confronted by on-going pressures and demands which are (seemingly) irresolvable. The term 'burnout' was used in 1974 by Freudenberger to reflect his observations on the extreme stress often experienced by workers in the helping professions, such as social work, nursing, and teaching. There have been many studies of burnout, primarily among human
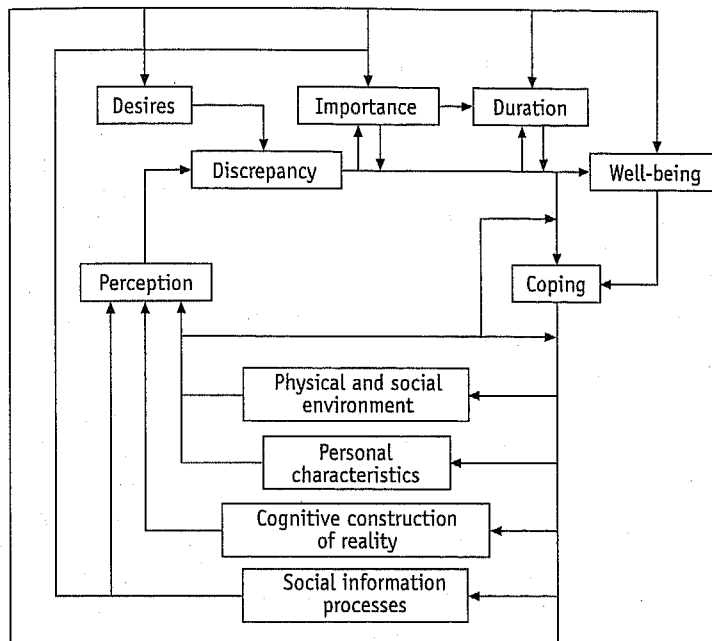

Fig. 8.3 The cybernetic theory of stress, coping and well-being (Edwards, 1998, p. 128, used with permission from J. Edwards and Oxford University Press)

service professionals, but also increasingly in other areas of employment (e.g., managers in general). Burnout is, therefore, a chronic affective response to very extreme demands (Ganster and Schaubroeck, 1991), especially pressures and conflicts arising from contact with and responsibility for the performance or well-being of other people.

MEASURES OF JOB-RELATED STRAIN

In this section, we briefly outline more commonly used approaches to assessing stress in work environments. Our focus here is on strain itself (both physical and psychological), not the stressors which induce strain or burnout, which are discussed later.

Self-reported Psychological Strain and Burnout

Many studies of workplace stress have utilized self-reports to gauge the extent of psychological strain experienced. We present two examples, one assessing psychological strain in general, and the other focusing on burnout. (For other approaches, see Chapter 1 and Further Reading at the end of this chapter.) A self-report measure of psychological strain which has been frequently utilized is the General Health Questionnaire (GHQ), developed by Goldberg (1978) to detect minor psychological disturbance in non-clinical populations. This focuses on issues such as ability to concentrate on tasks, losing sleep because of worries, feeling constantly under strain, and feeling unhappy and depressed. A twelve-item version of the GHQ was recommended by Banks, Clegg, Jackson, Kemp, Stafford and Wall (1980) for assessing strain in employment settings, and has been utilized in numerous studies.

The most commonly used device to assess burnout is the Maslach Burnout Inventory (Maslach and Jackson, 1986; Maslach, Jackson and Leiter, 1996). The 1986 version of this instrument incorporated self-reports on three components of burnout:

⊛ Emotional exhaustion: a depletion of emotional energy and a feeling that one's emotional resources are inadequate to deal with the pressures encountered;

⊚ *Depersonalization*: excessive detachment from the people with whom one works, treating individuals in the work setting (e.g., clients or patients) as objects rather than people;

⊚ *Reduced personal accomplishment*: evaluating one's performance negatively, leading to feelings of incompetence and inability to achieve goals.

While the original MBI was designed primarily for assessing burnout in human service professionals, the revised MBI–General Survey (1996) is more applicable to non-service occupations. Emotional exhaustion remains the primary component, but depersonalization was replaced with *cynicism*, which reflects 'indifference or a distant attitude towards work ... as a way of coping with exhausting demands' (Maslach *et al.*, 1996, p. 21). Similarly, reduced personal accomplishment was renamed *reduced professional efficacy*, to encompass a broader array of performance indicators.

Physiological Measures of Strain

Most research on strain has been psychologically-orientated, hence measurement of physiological strain has been less common. However, indicators such as elevated heart rate, blood pressure, serum cholesterol and urinary catecholamines have been examined. Typically these measures are collected concurrently with other indices of strain, such as self-reports (Hendrix, Ovalle and Troxler, 1985). Unfortunately, however, evidence for the correspondence between self-reports and physiological indices has been inconsistent (Pennebaker and Watson, 1988), and further research is needed to confirm their comparability. Fox, Dwyer and Ganster (1993) examined the relationship of job demands and physiological outcomes, using both subjective and objective assessments, and found that blood pressure and cortisol levels vary with changes in environmental pressures on the individual.

Studies exploring physiological components of strain have typically focused on one or more of the following indicators: cardiovascular symptoms (especially increased heart rate and blood pressure), biochemical reactions (such as blood cholesterol), and gastrointestinal symptoms (e.g., peptic ulcers). There is mounting evidence that stressors arising from excessive physical demands or psychological pressures can influence these

physiological reactions (Fox et al., 1993). Given this, tapping into physiological responses holds promise as a viable complementary method of assessing workplace stress.

Objective physiological assessments offer several advantages. They are not subject to the potential biases of self-reports, since they do not rely upon respondent recall and subjective description of strain. Also, they may enable more precise discriminations between levels of strain experienced by different individuals. In some cases, however, physiological indices are assessed via self-reports (simply asking individuals about their health), which may contain the same biases that are found in other types of self-report (Jex and Beehr, 1991).

Behavioural Indicators of Strain

Behavioural reactions to work-related stressors have been the least explored of all strain indicators (Cooper, Dewe and O'Driscoll, 2001). As noted by Jex and Beehr (1991), this is 'ironic since, at least from an organizational point of view, these may be the most important' (p. 337). Costs to the organization of behavioural responses to stress can be quite substantial.

Several behavioural indicators have been examined by researchers. Jex and Beehr (1991) distinguished between those which have significance for the organization (for example, job performance, turnover and absenteeism) and those which are more salient for individuals (such as substance abuse and destructive behaviours). Kahn and Byosiere (1992) identified fifteen behavioural reactions and classified them into five categories, which they labelled *work role disruptions* (e.g., errors, accidents), *job flight* (e.g., absenteeism, turnover), *aggressive behaviour* (e.g., vandalism, rumour spreading), *disruptions to non-work life* (e.g., interference with marital relationship), and *self-damaging behaviours* (e.g., substance abuse). Caution needs to be exercised in inferring that the above behaviours are necessarily caused by work-related stressors. They may be due, for instance, to off-the-job factors or even dispositional tendencies. Similarly, the assessment of stress-related behaviours can be quite difficult. Nevertheless, the measurement of behavioural indicators of strain is becoming increasingly relevant for developing effective stress management interventions.

SOURCES OF STRAIN

Considerable knowledge has accumulated about factors which produce job-related strain among employees. Determinants of strain can be grouped into three general categories: job-specific sources, organizational sources, and individual (personal) sources. Within the first two of these categories (job-specific sources and organizational sources), six primary stressors can be differentiated (Cartwright and Cooper, 1997): intrinsic characteristics of the job; roles in the organization; relationships at work; career development; organizational structure and climate; home–work interface.

Intrinsic Job Characteristics

These stressors are associated with the performance of specific tasks that comprise an individual's job, and are sometimes called 'task content' factors (Kahn and Byosiere, 1992). They include the level of job complexity, the variety of tasks performed, the amount of discretion and control individuals have over the pace and scheduling of their work, and even the physical environment in which the job is performed. Numerous studies have demonstrated that lack of variety, monotonous work, and an absence of discretion and control are predictors of job-related strain (Kahn and Byosiere, 1992). Similarly, poor working conditions (for instance, excessive noise and temperature) can have detrimental effects on employee psychological well-being and physical health (Cooper et al., 2001).

Work schedules (such as shiftwork) have also been explored by stress researchers. While shiftwork in general may have an effect on well-being (see Chapter 3), there is considerable variation in reactions to shiftwork, with some workers adapting more readily than others to changes in their work hours. Some of the difficulties associated with shiftwork may be alleviated by compressed shift schedules (e.g., working four twelve-hour days), which can better match job and off-the-job (e.g., family) activities (Pierce and Dunham, 1992).

Finally, the sheer amount of work is a significant stressor for many

people. Having to work under time pressures to meet deadlines is a major stressor (Narayanan, Menon and Spector, 1999), and has been associated with high levels of strain, anxiety and depression (Westman and Eden, 1992). On the other hand, work which is repetitive, routine and provides little challenge for the individual can also be stressful if engaged in over long periods (Cooper and Kelly, 1993).

Organizational Roles

Around the same time that French and his colleagues were developing their person–environment fit model, Kahn, Wolfe, Quinn and Snoek (1964) began to explore the effects of role conflict, role ambiguity and role overload. Role *ambiguity* refers to unpredictability of the consequences of one's role performance, along with a lack of information needed to perform the role. Research has demonstrated a consistent link between role ambiguity in the job and high levels of psychological strain and burnout (O'Driscoll and Beehr, 2000; Zohar, 1997).

Similarly, role *conflict*, when the person experiences incompatible demands, can induce negative emotional reactions due to perceived inability to be effective on the job (King and King, 1990). Several studies have confirmed this detrimental effect, on both self-reported strain (O'Driscoll and Beehr, 1994) and physiological indicators (Kahn and Byosiere, 1992). Typically, however, the association between role conflict and psychological strain is not as strong as that between ambiguity and strain (Jackson and Schuler, 1985), although role conflict may be especially salient in the development of the emotional exhaustion component of burnout (Schaufeli and Buunk, 1996).

A third role variable is *overload*, which refers to the number of different roles a person has to fulfil and the amount of work required. Role overload can lead to excessive demands on an individual's time and may create uncertainty about one's ability to perform these roles adequately. Along with role ambiguity and conflict, overload has been found to be a major correlate of job-related strain and burnout (Cooper *et al.*, 2001).

An explanation for the negative effects of these role variables on physical and psychological well-being is that they lead to uncertainty, which is psychologically distressing and can induce emotional disturbance. Beehr (1987) adapted the expectancy theory of motivation to explain

the diverse forms of uncertainty which may arise from role stressors. Ambiguity, conflict and overload may be linked with reduced effort-to-performance (E → P) expectancy because they create uncertainty among employees that their efforts will lead to satisfactory job performance, and with reduced performance-to-outcome (P → O) expectancy because employees are unsure of the link between rewards and successful job performance. For instance, O'Driscoll and Beehr (1994) found that these forms of uncertainty were significantly related to psychological strain and job dissatisfaction.

Work Relationships

Interpersonal relationships at work have been explored as sources of psychological strain. As we discuss shortly, there has been considerable debate over the role of social support as a moderator (or 'buffer') of the impact of stressful environments. It is clear, however, that negative interpersonal relations and the absence of support from colleagues or superiors can be significant stressors for many employees (O'Driscoll and Beehr, 1994). Conversely, having access to social support from other people in the organization can directly reduce psychological strain (Beehr and McGrath, 1992) and alleviate emotional exhaustion (Greenglass, Burke and Konarski, 1998).

Career Development

This category of potential stressors includes job insecurity, under- and over-promotion within the organization, and lack of achievement of one's goals (Cooper et al., 2001). In many countries the level of unemployment has escalated in recent years (Hanisch, 1999). Coupled with the introduction of new technologies which often result in a deskilling of the workforce (Korunka, Weiss, Huemer and Karetta, 1995), the threat of redundancy has heightened stress levels in many occupational groups (Burke and Cooper, 2000). In fact, job insecurity may be one of the single most salient sources of stress for employees today. Even when individuals believe their job is (relatively) secure, lack of promotion or career advancement is cited as a major source of dissatisfaction and strain (Jewell, 1998). There is also evidence that, despite changes in societal

attitudes concerning equal employment opportunities, women and minority groups still encounter organizational barriers to their career development (Burke, 1993), which can lead to higher strain for these employees.

Organizational Structure and Climate

Psychological strain is often due to the culture and management style adopted within an organization (Cartwright and Cooper, 1997). Hierarchical, bureaucratic organizational structures allow little employee participation in decisions affecting their work and lack adequate communication, especially between managerial and non-managerial levels. The 'politics' which occur in work organizations can also have a substantial impact on employees. A climate characterized by communications focusing on negative attributes of other personnel, cynicism regarding leadership and management of the organization, and attempts by employees to further their own interests at the expense of others, will induce feelings of unsupportiveness and mistrust, which in turn increase the stressfulness of work conditions (Cropanzano, Howes, Grandey and Toth, 1997).

The Home–Work Interface

Managing the relationship between job demands and off-the-job responsibilities is another source of strain and burnout which has been studied in recent years (Cooper and Lewis, 1998). Changes in family structures and increased participation by women in the workforce, along with technological changes (such as portable computers and cellular phones) which enable job tasks to be performed outside the actual work setting, have blurred the boundaries between the job and life off the job, and can create conflict between job and off-job roles. This inter-role conflict has consistently been linked with increased psychological strain, and is especially prevalent among women and dual-career couples (O'Driscoll, 1996). Flexitime, on-site childcare facilities and other 'family-supportive' programmes are some of the initiatives which have been developed to alleviate job–family conflict and strain (Kramar, 1997).

MODERATORS OF THE STRESSOR-STRAIN RELATIONSHIP

Attention has also been given to variables which may moderate the impact of the above factors on strain experienced by employees. Research has looked for variables which might protect or buffer the individual from the negative effects of stressful work conditions. These potential moderators can be grouped into three categories: personal variables, job-related variables, and organizational variables.

Personal Moderators

Individual differences may play a major role in the relationship between work-related stressors and psychological strain. A number of studies have examined personality differences; here we focus on three which have received considerable attention. One of these is the *Type A behaviour* style, which is characterized as aggressive, ambitious, hard-driving, impatient, seeking to control, and expressing time urgency (Cooper and Bramwell, 1992). The Type A behaviour pattern is an interesting dispositional characteristic, since it may lead to both positive (e.g., high performance) and negative (e.g., high strain and possibly burnout) outcomes. Since it was first identified as a possible risk factor for coronary disorders, several studies have shown that persons demonstrating Type A characteristics are more likely than their Type B counterparts to experience negative effects from job demands (Ganster and Schaubroeck, 1991). For instance, Froggatt and Cotton (1987) illustrated that Type A individuals create more strain for themselves by increasing the volume of their workload. Nevertheless, there is still debate about the mechanism by which the Type A behaviour style affects levels of psychological strain. While it is possible that Type A people subject themselves to more stressful work conditions, it is also feasible that they appraise events as being more stressful than do Type Bs, or that they utilize different methods for coping with strain. Overall, research suggests that the Type A behaviour pattern does not necessarily have across-the-board negative consequences, but certain elements of the disposition (especially hostility) may increase proneness to strain.

Another dispositional variable which may have a significant bearing on the stressor–strain relationship is *negativity affectivity* (NA), a construct which overlaps to some extent with neuroticism, and which reflects a relatively stable tendency to experience low self-esteem and negative emotional states (Watson and Clark, 1984; see also Chapter 1). Individuals who are very high in NA are more susceptible to stressors and experience more strain than their low-NA counterparts. Spector, Zapf, Chen and Frese (2000) have outlined various explanations for the effects of NA, including that high NA individuals have a gloomy 'view of the world' and may be more sensitive to stressful conditions. It is also possible that negative feelings about life may spill over into a person's verbal and non-verbal behaviours, hence inducing negative reactions from colleagues and leading to a conflictual social environment.

A third personality moderator of stressor–strain linkages is *self-esteem* or *self-efficacy* (SE). For instance, Brockner (1988) argued that individuals low on SE tend to react more to external events because they experience more uncertainty about the correctness of their perceptions and emotional reactions (hence rely more on social cues), seek social approval by conformity with others' expectations, and tend to allow negative feedback on one area of their behaviour to generalize to other dimensions of their self-concept. Ganster and Schaubroeck (1995) noted that self-esteem might influence the coping strategies used to combat stressors, with low SE persons selecting less effective coping behaviours.

Job-related Moderators

Although there are many features of the job itself which may act as moderators of the association between work-related stressors and strain, one which has received particular attention is perceived *situational control*: the extent to which individuals believe they can exert control over specific aspects of their job, such as the pace of work, procedures for task completion and scheduling of tasks. Karasek (1979) proposed that strain develops from the combined influence of job demands (workload) and the extent of control over important decisions in the workplace (decision latitude). Where individuals have the capacity to influence decisions relevant to the completion of their job tasks, the level of strain due to a high workload is likely to be diminished. In other words, decision

latitude is predicted to serve as a moderator of the impact of job demands.

Despite the intuitive appeal of this argument, research findings on the role of control in stressor–strain relationships are very mixed, and some studies (e.g., O'Driscoll and Beehr, 2000) have not demonstrated a moderator effect. Two recent studies illustrate that clearer specification of the control variable is needed. Wall, Jackson, Mullarkey and Parker (1996) found a moderator effect for perceived job control only when that was explicitly tailored to the job demands experienced by employees. Similarly, Sargent and Terry (1998) observed a moderator effect for control over central areas of one's work, but not for more peripheral areas of control, suggesting that control over particularly important aspects of the work environment may be a critical factor in reducing strain.

Organizational Moderators

Earlier we mentioned that the structure and climate of an organization can influence the degree of strain and burnout experienced by employees. Numerous studies have been conducted on social relationships in the workplace, especially the *social support* employees receive within their organization. There is consistent evidence that employees with more support from others (e.g., their boss, colleagues) experience lower levels of strain and burnout (Lee and Ashforth, 1996). Also, where an individual is faced with potentially stressful demands, conflicts and problems in the job, having support from others may reduce the impact of these pressures on that person's well-being. Social support is therefore expected to buffer or protect the individual from the negative consequences of work-related stressors.

Unfortunately, evidence for the mollifying influence of social support in work situations is very mixed. Moyle and Parkes (1999) found that managerial support reduced the amount of strain experienced by supermarket employees as a result of a forced relocation to another store, and Greenglass, Fiksenbaum and Burke (1996) observed that support from colleagues and supervisors had a significant buffering influence on teacher burnout. Other studies, however, have found no evidence of buffering and yet others have obtained a 'reverse' buffering effect, in which the presence of social support exacerbates the amount of strain experienced by employees (Ganster, Fusilier and Mayes, 1986). The type of buffering

which occurs may depend on the nature of support provided. Practical and emotional support which assists the individual to cope with difficult circumstances may have a mitigating influence on strain. In contrast, where communication serves to reinforce the difficulties and problems a person is experiencing in the workplace, this is likely to increase, rather than reduce, the degree of strain reported (Fenlason and Beehr, 1994).

MANAGING STRESS

We now turn to how people and organizations can deal with job-related strain and burnout. In this section we look at coping strategies which individuals might use, and in the next section we discuss possible organizational stress management interventions. Dewe, Cox and Ferguson (1993) defined *coping* as 'cognitions and behaviors adopted by the individual following the recognition of a stressful encounter, that are in some way designed to deal with that encounter or its consequences' (p. 7). Coping refers to the cognitive, behavioural and physiological responses which individuals engage in to (1) eliminate or reduce stressors, (2) alter their appraisal of the potential harmfulness of these stressors, or (3) minimize the extent of strain which they experience.

The coping process is a transaction between the individual and the environment. According to Lazarus and Folkman's (1984) transactional model of stress, there are four main components in coping:

● primary appraisal (perception of a 'threat' to well-being);
● secondary appraisal (identifying possible coping strategies);
● implementation of a coping response;
● evaluation of whether the response was effective in enabling the person to deal with the stressor(s).

Primary and secondary appraisals determine the significance of an event or occurrence for the individual and what, if anything, can be done to minimize its impact.

Lazarus and Folkman distinguished between problem-focused and emotion-focused strategies, and this typology has served as a popular framework for understanding the diversity of stress-coping behaviours. *Problem-focused* strategies involve direct action to remove the stressor or

to reduce its impact, while *emotion-focused* behaviours attempt to minimize the emotional effects of a stressor, for instance by downplaying the importance of an event, a process known as cognitive restructuring. Another form of coping, separate from either problem-focused or emotion-focused strategies, occurs when individuals endeavour to enhance their well-being via regular exercise, diet, or use of relaxation techniques, in order to avoid the negative effects of stressful work conditions. This is sometimes referred to as *symptom management*.

Many instruments have been developed for studying coping processes (see Dewe *et al.*, 1993). One popular approach is Lazarus and Folkman's (1984) Ways of Coping questionnaire, which categorizes specific coping behaviours, such as planning and problem-solving, escape/avoidance, distancing oneself from the sources of stress, and altering one's emotional response to stressful situations. Other methods are frequently based upon this instrument. However, research on stress-coping has been plagued by conceptual and methodological difficulties which have impeded progress toward a complete understanding of coping behaviours. A major concern is that many existing measures of coping were not developed from observations of how people actually respond in stressful situations, but were based rather on researchers' own assumptions about possible coping strategies (Dewe *et al.*, 1993). This criticism has been levelled in particular at instruments which provide respondents with a predetermined list of coping responses and ask them to select those which they would use to counter stressors in their work environment. In some cases, the relevance (to the respondent) of the coping responses provided is questionable.

Another issue is whether individuals have preferred *styles of coping* which are stable across time and situations, or whether they adopt *specific strategies* in response to different stressors (Terry, 1994). A few studies have attempted to explore the relationship between coping behaviours and specific stressors. For example, Wiersma (1994) used critical incident analysis to identify sources of work–home role conflicts among dual-career couples, and then link these to coping behaviours. Conflict due to role overload was handled most often by obtaining support from non-family members, dividing tasks among family members, setting priorities and cognitive reappraisal of the situation.

Because they attempt to deal with the actual source of strain, problem-focused approaches could be more helpful in the longer term than

emotion-focused coping, which attempts to change a person's evaluations of stressors but may have no direct effect on the environment itself. However, there is no clear consensus on which modes of coping are consistently effective. Furthermore, there are situations in which the individual has little control or influence over environmental variables. For example, in assembly line operations the pace of work is normally determined by machine technology, and workers themselves have little control over this process. Under these circumstances, pressures and demands arising cannot be countered by individual action alone, and, unless organizations modify work technologies and processes, a reduction in psychological strain is unlikely.

ORGANIZATIONAL STRESS MANAGEMENT INTERVENTIONS

Organizational stress management interventions can be targeted either at the individual him/herself (for instance, developing more effective coping behaviours) or at the work conditions (for example, reducing workload). Murphy (1988) identified three levels of organizational stress management intervention:

● primary: reduction of stressors in the workplace;
● secondary: assisting individuals to cope with workplace stressors;
● tertiary: providing support to individuals who are experiencing the effects of job-related strain or burnout.

Primary interventions are typically developed following assessment of the specific strain-inducing factors in a work setting. Examples include reducing individuals' workloads or redesigning jobs to remove ambiguity and conflict. Secondary interventions focus on training individuals to develop more effective coping strategies, while tertiary interventions (often referred to as employee assistance programmes) provide support and counselling for workers whose well-being or job performance has been negatively influenced by workplace stress. Most stress management programmes are predominantly secondary or tertiary level interventions, and may be conducted by stress management consultants or counsellors who assist employees either to reappraise the stressfulness of their work

conditions or to cope with job-related stressors. Often more attention is given to modifying employee cognitive appraisals and coping (secondary level interventions) or offering programmes which provide training and counselling for employees experiencing stress (tertiary level interventions), than to eliminating or reducing the actual stressors themselves (Kahn and Byosiere, 1992).

Evidence for the efficacy of secondary interventions, in particular, is inconsistent (Cartwright and Cooper, 1997). Stress management training is often generic in nature, rather than targeting specific work-related stressors, and there may be little preliminary diagnosis of the needs of employees or the organization (Ivancevich, Matteson, Freedman and Phillips, 1990). Employee assistance programmes, which typically incorporate counselling and support services for employees, have shown somewhat more promise as an approach to dealing with stressors, although empirical evidence on their effectiveness is again limited (Cooper and Sadri, 1991). Training and counselling employees to tolerate or cope with poorly designed jobs or organizations may yield short-term gains, but have questionable benefits for long-term mental health and well-being.

Strategies which entail changes at the broader organization level include: redesigning tasks, redesigning the physical work environment, role clarification, establishing more flexible work schedules, participative management, providing feedback and social support for employees, and more equitable reward systems. Many of these approaches are directed toward increasing worker autonomy, participation and control, which we discussed earlier as potential moderators of the stressor–strain relationship, and can be regarded as preventative measures (primary interventions).

Few studies assessing organizational changes have been published. For instance, Ivancevich et al. (1990) found only four evaluations where organizational interventions had been targeted, one on participative decision making, one which studied the effects of more flexible work schedules, a third investigating changes in work design which increased levels of autonomy, and finally one on the effects of introducing an employee representative committee whose function was to develop recommendations on stress management. Reductions in employee strain resulted from all these interventions. Burke (1993) also summarized research on several stress management programmes, including (in addition to those reviewed by Ivancevich and his associates): goal setting

(to enhance role definition and clarity), use of problem-solving to resolve work-related difficulties, reducing the amount of conflict between job demands and family responsibilities, and increasing communication and information sharing between management and employees. Burke concluded that, overall, these interventions yielded positive benefits. However, this conclusion has been questioned by Briner and Reynolds (1999), who suggested that the studies reviewed by Burke varied in methodological rigour and contained mixed outcomes.

An illustration of a well-conducted stress management evaluation is a field experiment conducted by Ganster, Mayes, Sime and Tharp (1982). The intervention was a stress management training programme delivered over an 8-week period, and comprised 8 two-hour group training sessions in which employees were taught to recognize and modify their perceptions of stressful working conditions (a procedure known as 'cognitive restructuring'), coupled with training in progressive relaxation. Ganster *et al.*'s evaluation included random assignment of employees to either a treatment or control group (who did not receive the training). Three strain responses were assessed: psychological (anxiety, depression and irritation), physiological (levels of urine epinephrine and norepinephrine), and somatic complaints. These measures were collected at three points in time: pre-training, post-training, and a four-month follow-up to assess (relatively) long-term effects of the training programme. Ganster *et al.* found that employees who underwent the stress management training exhibited significantly lower post-training levels of epinephrine and depression than did control group employees. Effects of the training on other indices of strain were less definitive. Moreover, these effects were not replicated when the control group also underwent the training, suggesting a lack of generalizability. Ganster *et al.* concluded that the evidence was not sufficiently clear-cut to recommend the use of stress management training to alleviate the impact of workplace stressors.

From a managerial standpoint, it may be more convenient to target individual coping than to change organizational structures or redesign jobs. Not only might stress management training and employee assistance programmes be viewed as less costly and more readily implemented than long-term restructuring or major changes in work practices and procedures, but they may also deflect management from accepting responsibility for excessive strain experienced by their employees. However,

as noted by Burke (1993), among others, removal or reduction of stressors is 'the most direct way to reduce stress since it deals with the source' (p. 85). There is mounting evidence that job redesign interventions (especially those which increase employee control and autonomy) (see also Chapter 11), adoption of more consultative or participative management styles, development of clearer role descriptions, and utilization of more effective goal-setting and performance feedback systems can all enhance employee well-being and alleviate work-related strain. While these approaches may entail immediate costs for the organization and require greater commitment and effort from management, those may be offset by long-term benefits for individual employees and for the organization as a whole.

There is increasing acknowledgement that some environmental stressors cannot be effectively dealt with solely at the individual level, and that responsibility for stress management must be shared by all constituents of an organization. Individuals need to assume personal responsibility for their appraisal of situations and for the behaviours they engage in to cope with the demands and pressures which are an inevitable element of worklife. On the other hand, management has responsibility for designing jobs and organizations which enhance, rather than detract from, employee physical and mental health. A collaborative approach to dealing with stress and burnout will result in work environments which are often both more productive for organizations and more healthy for the people who work within them.

SUMMARY

Work-related strain and burnout are costly, for organizations and individuals, so there has been considerable investigation of how stress is manifested and methods for dealing with it. In this chapter we have discussed forms of workplace strain and how it might be assessed, some of the major sources of strain and burnout, along with factors which might moderate (buffer) the impact of stressors on well-being. It is clear that there are numerous factors in people's jobs and their work settings which may create both psychological (emotional) and physical strain. Some of these stressors can be managed by individual coping strategies

(such as problem-focused and emotion-focused coping), but others require some form of organizational intervention (such as redesigning jobs, reducing workloads, and providing direct assistance to .employees experiencing strain). Stress management is a joint responsibility of both individual employees and managers in organizations.

FURTHER READING

Cooper and Quick (1999) provide further information on the effects of stress on health and illness, as does the book by Dunham (2000). Another important topic is the identification of workplace stressors and strain, which is discussed in Sutherland and Cooper (1999). For further coverage of theory and research on occupational stress and burnout, see Cooper (1997) and Schaufeli, Maslach and Marek (1993). Murphy and Cooper (2000) overview various approaches to stress management, especially organizational-level interventions. Finally, a comprehensive review and critique of theory, research and applications is given in Cooper, Dewe and O'Driscoll (2001).

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