Professional Burnout

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15.1 A BRIEF HISTORY OF THE BURNOUT CONCEPT

Burnout is a metaphor that is commonly used to describe a state or process of mental exhaustion, similar to the smothering of a fire or the extinguishing of a candle. The dictionary defines 'to burn out' as 'to fail, wear out, or become exhausted by making excessive demands on energy, strength, or resources'. Probably the earliest example in which 'to burn out' is related to exhaustion comes from Shakespeare, who wrote in 1599 in *The Passionate Pilgrim*, 'She burnt with loue, as straw with fire flameth. She burnt out loue, as soon as straw out burneth' (cited in Enzmann and Kleiber, 1989, p. 18). More recently, but long before the 'discovery' of burnout in professional settings, people who suffer from it have been portrayed in great detail, for instance, in Graham Greene's 1960 novel *A Burnt-Out Case*, which tells the sad story of the world famous architect Querry, a gloomy, spiritually tormented, cynical and disillusioned character. The most illustrious example of burnout avant-la-lettre is the case study of a psychiatric nurse, Miss Jones, published by Schwartz and Will (1953) in *Psychiatry*.

15.1.1 The 'Discovery' of Professional Burnout

Although the term 'staff burnout' was first mentioned by Bradley (1969) in an article about probation officers running a community based treatment programme for

juvenile delinquents, Herbert Freudenberger (1974) is generally considered to be the founding father of the burnout syndrome. His influential paper on staff burnout set the stage for the introduction of the concept. As an unpaid psychiatrist, Freudenberger was employed in a New York Free Clinic for drug addicts that was staffed mainly by young, idealistically motivated volunteers. Freudenberger observed that many of them experienced a gradual energy depletion and loss of motivation and commitment, which was accompanied by a wide array of mental and physical symptoms. To label this particular state of exhaustion, which usually occurred about one year after the volunteers started working in the clinic, Freudenberger chose a word that was being used casually to refer to the effects of chronic drug abuse: burnout.

At about the same time, Christina Maslach (1976), a social psychologist, became interested in the way in which people in the human services cope with emotional arousal on the job. She noticed that the term 'burnout' was colloquially used by Californian poverty lawyers to describe the process of gradual exhaustion, cynicism and loss of commitment in their colleagues. Maslach and her co-workers decided to adopt this term because it was easily recognized by the interviewees in their study among human services professionals.

15.1.2 The Pioneer Phase

After the introduction of the concept by Freudenberger (1974, 1975) and by Maslach and her colleagues (Maslach, 1976; Pines and Maslach, 1978), burnout soon became a very popular topic. Apparently, the appropriate name had been given to something that was 'in the air'. The first publications on professional burnout appeared primarily in journals, magazines and periodicals for a variety of professionals, including not only teachers, social workers, nurses, physicians and managers, but also dentists, fire fighters and librarians. The mass media eagerly picked up the burnout concept, and public interest in this topic grew enormously, making burnout a buzz word in the late 1970s, and early 1980s. At the same time, a tremendous proliferation of workshops, training materials and interventions took place. In a certain sense, burnout became big business.

Because in this so-called pioneer phase (Maslach and Schaufeli, 1993) it was mainly practitioners and the general public who were interested in professional burnout, the conceptual development was influenced by pragmatic rather than scholarly concerns. This resulted in a blurred, all-encompassing meaning of burnout. Many authors stretched the concept of burnout to encompass far more than it did originally, so that in the end it ran the risk of hardly meaning anything at all. Furthermore, the early burnout literature was descriptive and not empirical, and relied heavily on unsystematic observations. Narrative papers mainly emphasized the importance of individual factors, such as overcommitment, idealism and perfectionism. An early review indicated that only 5 of the 48 articles included empirical data that went beyond an occasional anecdote or personal case history (Perlman and Hartman, 1982).

The image of burnout as a popular term used by journalists and practioners

hampered the serious scientific study of this phenomenon. This is nicely illustrated by the rejection of the psychometric article that introduced the Maslach Burnout Inventory (MBI), which was later to become the most widely used and best validated instrument to assess burnout. The journal editor returned the manuscript with a short note saying that it had not even been read 'because we do not publish "pop" psychology' (Maslach and Jackson, 1984, p. 139).

15.1.3 The Empirical Phase

Despite the fact that professional burnout initially was not viewed as a serious scientific topic, empirical research on this phenomenon started to flourish from the beginning of the 1980s. Kilpatrick (1989) counted 195 published research articles on burnout up to 1987. A major impulse came from the introduction of short and easy to administer self-report questionnaires to assess burnout (cf. Schaufeli, Enzmann and Girault, 1993). In particular, the popularity of the MBI grew rapidly, and with it the multidimensional model of burnout that the inventory is supposed to measure (Maslach and Jackson, 1981, 1986). Academic interest was also stimulated by scholarly books that offered comprehensive social psychological (Maslach, 1982a; Pines and Aronson, with Kafry, 1981) and organizational (Cherniss, 1980a,b; Golembiewski, Munzenrider and Stevenson, 1986) perspectives on burnout.

Maslach and Schaufeli (1993), distinguished five trends in the so-called empirical phase, which started in the mid-1980s. The first of these was the almost universal use of a limited set of standardized burnout questionnaires—especially the MBI—which highly structured the field. Secondly, burnout started to attract attention in other countries outside the USA, beginning with English speaking countries such as the UK and Canada, but soon followed by countries from the European mainland (e.g. Germany, France, Sweden, Spain, Poland, Italy and The Netherlands) and from Asia (e.g. Israel, Jordan, China and Japan). The first cross-national studies appeared (for a review, see Golembiewski, Scherb and Boudreau, 1993). Thirdly, most of the research continued to be done within people-orientated, human services occupations. Only occasionally was burnout extended to other populations or non-occupational areas such as sports or political activism. According to a recent bibliography on burnout that included 2496 publications, 43% referred to the fields of health and social work, 32% to education, 9% to administration and management, 4% to law enforcement and police, and 12% to other groups (e.g. students, married couples and priests) (Kleiber and Enzmann, 1990). Fourthly, research tended to focus more on job and organizational factors than on individual factors, which is consistent with most of the models developed in this area. Finally, the methodological rigour of burnout research has improved over the years (Kilpatrick, 1989). Two recent trends could be added to this list: (i) a growing number of comprehensive conceptual approaches that have proposed to link burnout to other psychological theories; and (ii) an increased interest in the development of burnout over time (cf. Schaufeli, Maslach and Marek, 1993).

15.2 DEFINITIONS OF BURNOUT

In most early writings burnout was 'defined' merely by summing up the symptoms (e.g. Freudenberger, 1974, p. 160). Such 'laundry lists' are problematic because they are inevitably selective and because they tend to ignore the dynamic aspect of the syndrome. These drawbacks are avoided either by selecting the most characteristic core symptoms of burnout, as is done in state definitions, or by describing the process of burnout, as is done in process definitions. Of course, both types of definitions—of which only the most important examples are presented—are not mutually exclusive. Even more so, in a certain sense they are complementary, because state definitions describe the end state of the burnout process.

15.2.1 State Definitions of Burnout

Probably the most frequently cited definition of burnout comes from Maslach and Jackson (1986, p. 1):

Burnout is a syndrome of emotional exhaustion, depersonalization, and reduced personal accomplishment that can occur among individuals who do 'people work' of some kind.

Its popularity is due to the fact that the most widely used self-report questionnaire, the MBI, includes the three dimensions that are mentioned in this definition. Emotional exhaustion refers to the depletion or draining of emotional resources. Depersonalization points to the development of negative, callous and cynical attitudes towards the recipients of one's services. The term 'depersonalization' may cause some confusion, since it is used in a completely different sense in psychiatry to denote a person's extreme alienation from the self and the world. However, in the definition of Maslach and Jackson, the term refers to an impersonal and dehumanized perception of recipients, rather than to an impersonal view of the self. Finally, lack of personal accomplishment is the tendency to evaluate one's work with recipients negatively. Burned-out professionals believe that their objectives are not achieved, which is accompanied by feelings of insufficiency and poor professional self-esteem. Most importantly, Maslach and Jackson (1981, 1986) claim that burnout occurs exclusively in occupational groups where professionals deal directly with recipients such as students, pupils, clients, patients, consumers or delinquents. Hence, burnout is, in their view, restricted to the helping professions, including health care, education and the human services.

Pines and Aronson (1988) present a somewhat broader definition of burnout. Unlike Maslach and Jackson (1986), these authors include physical symptoms as well, and do not restrict burnout to the helping professions. They describe burnout as:

a state of physical, emotional, and mental exhaustion caused by long-term involvement in situations that are emotionally demanding. (p. 9)

Physical exhaustion is characterized by low energy, chronic fatigue, weakness and a wide variety of physical and psychosomatic complaints. Emotional exhaustion

involves feelings of helplessness, hopelessness and entrapment. Finally, mental exhaustion refers to the development of negative attitudes towards one's self, work and life itself. Since excessive emotional demands are not restricted to the human services, burnout can, according to Pines (1993), also occur in occupational settings such as managerial jobs, as well as in such diverse settings as love and marriage, and political activism.

Finally, a less well-known but more precise definition of burnout has been proposed by Brill (1984, p. 15):

Burnout is an expectationally mediated, job-related, dysphoric and dysfunctional state in an individual without major psychopathology who has (1) functioned for a time at adequate performance and affective levels in the same job situation and who (2) will not recover to previous levels without outside help or environmental rearrangement.

Accordingly, distress from lay-off or economic hardship is not interpreted as burnout since it is not expectionally mediated. Moreover, burnout can occur in every type of job but not outside the occupational context. In addition, incompetent individuals are excluded as well as those who suffer from mental illness. Finally, individuals who either experience a temporary decrement in their performance or who are able to recover on their own are not considered burned-out.

To summarize, although state definitions of burnout differ in scope, precision and dimensionality of the syndrome, they seem to share five common elements:

- 1. Dysphoric symptoms, and most notably emotional exhaustion, are predominant.
- 2. The accent is on mental and behavioural symptoms, although atypical physical symptoms are sometimes mentioned as well.
- 3. Burnout is generally considered to be work-related.
- 4. The symptoms are observed in 'normal' individuals.
- 5. Decreased effectiveness and work performance occur because of negative attitudes and behaviours.

15.2.2 Burnout as a Dynamic Process

More than a decade ago, Cherniss (1980a, p. 5) was among the first to propose a straightforward description of burnout as a process: 'Burnout refers to a process in which the professionals' attitudes and behavior change in negative ways in response to job strain'. More specifically:

The first stage involves an imbalance between resources and demands (stress). The second stage is the immediate, short-term emotional tension, fatigue, and exhaustion (strain). The third stage consists of a number of changes in attitude and behavior, such as a tendency to treat clients in a detached and mechanical fashion, or a cynical preoccupation with gratification of one's own needs (defensive coping). (Cherniss, 1980b, p. 17)

Thus, Cherniss considered excessive job demands as the root cause of professional burnout, fostered by a defensive coping strategy characterized by avoidance and withdrawal.

Other process definitions have emphasized the gradual development of burnout. For instance, Edelwich and Brodsky (1980) described burnout in the helping professions as a process of increasing disillusionment, the 'progressive loss of idealism, energy, and purpose experienced by people in the helping professions as a result of conditions in their work' (p. 14). According to Etzion (1987), burnout is a slowly developing process that starts without warning and evolves almost unrecognized up to a particular point. Suddenly and unexpectedly, one feels exhausted and one is not able to relate this devastating experience to any particular stressful event. Etzion suggested that:

continuous, barely recognizable, and for the most part denied, misfits between personal and environmental characteristics are the source of a slow and hidden process of psychological erosion. Unlike other stressful phenomena, the mini-stressors of misfit do not cause alarm and are rarely subject to any coping efforts. Thus the process of erosion can go on for a long time without being detected. (1987, pp. 16-17)

More recently, Hallsten (1993) presented a more complex framework for the process of burning-out. He defined burnout as 'a form of depression that results from the process of burning out, which is a necessary cause of burnout' (p. 99). Accordingly, it is not the outcome (i.e. a particular depressive state) that is considered to be specific for burnout but its aetiology: the process of burning out, which develops in several phases. Hallsten (1993) assumed that the process of burning out occurs 'when the enactment of an active, self-definitorial role is threatened or disrupted with no alternative role at hand' (p. 99).

To conclude, most process definitions of burnout maintain that burnout begins with stress resulting from the discrepancy between, on the one hand, the individual's expectations and ideals, and, on the other, the harsh reality of everyday occupational life. This stress may be consciously observed by the individual or it may remain unnoticed for a long time. Gradually, the individual starts to feel emotionally strained, and begins to change his or her attitudes towards the job and the people he or she works with, a process that finally results in burnout. The way in which the individual copes with stress is in most process definitions considered crucial for the development of burnout.

15.3 OLD WINE IN NEW BOTTLES?

Professional burnout has been equated with a myriad of terms, most of which are plagued by the same sort of definitional ambiguity: tedium, stress, job dissatisfaction, depression, alienation, low morale, anxiety, strain, tension, feeling 'worn-out', 'nerves', boredom, chronic fatigue, poor mental health, personal crisis, professional melancholia and vital exhaustion (cf. Maslach and Schaufeli, 1993). Thus, the distinctiveness of burnout from other related and more familiar psychological constructs is an important issue. In particular, questions have been raised about the extent to which burnout can be distinguished from job stress and depression.

15.3.1 Burnout and Job Stress

Occupational stress occurs when job demands tax or exceed the person's adaptive resources (Lazarus and Folkman, 1984). Stress is a generic term that refers to the temporary adaptation process that is accompanied by mental and physical symptoms. In contrast, burnout can be considered as a final stage in a breakdown in adaptation that results from the long-term imbalance of demands and resources, and thus from prolonged job stress (Brill, 1984). A related conceptual distinction between burnout and stress is that the former includes the development of negative attitudes and behaviours towards recipients, the job and the organization, whereas job stress is not necessarily accompanied by such attitudes and behaviours (Maslach, 1993). This assertion was empirically supported by Schaufeli and Van Dierendonck (1993), who showed the discriminant validity of burnout, as measured with the MBI (particularly depersonalization and reduced personal accomplishment), and generic mental and physical symptoms of job stress. Finally, it has been claimed that everybody can experience stress, while burnout can only be experienced by those who entered their careers enthusiastically, with high goals and expectations. For example, Pines (1993) has argued that individuals who expect to derive a sense of significance from their work are susceptible to burnout. Those without such expectations would experience job stress instead of burnout. Thus, burnout is a specific type of job stress that is characterized by its chronic and multi-faceted nature. Moreover, it includes the development of negative attitudes, and it occurs among initially highly motivated individuals.

15.3.2 Burnout and Depression

According to Freudenberger (1983), burnout tends, at least initially, to be job-related and situation-specific rather than pervasive. Instead, a 'real' depression generalizes across situations and other spheres of life. In a similar vein, according to Warr (1987), depression concerns context-free affective well-being, whereas burnout concerns job-related affective well-being. Nevertheless, although burnout and depression are different phenomena, they also overlap to a certain extent (e.g. Meier, 1984). Empirical research on the discriminant validity of both concepts shows that the emotional exhaustion component of burnout particularly is substantively related to depression. The relationships with the other burnout components, depersonalization and personal accompalishment, are less strong (Firth et al., 1986; Glass, McKnight and Valdimarsdottir, 1993; Leiter and Durup, 1994). The fact that depression is differently related to different components of burnout underlines the validity of a multidimensional model of burnout.

To conclude, it seems that burnout is a separate phenomenon, and that researchers of burnout are not just putting 'old wine in new bottles'. Burnout is, more than depression, a multidimensional phenomenon, but is at the same time, unlike depression, restricted to the job setting. Moreover, burnout is different from job stress in several ways: it refers more to a breakdown in adaptation as a result of

prolonged job stress, it is characterized by a multidimensional symptomatology, particularly specific attitudes, and it seems partly the result of a high initial level of motivation.

15.4 MEASUREMENT

Many different instruments to assess professional burnout have been proposed (for a review see Schaufeli, Enzmann and Girault, 1993). Most of these instruments are self-report measures, particularly designed to assess the level of burnout in the human services professions. Although all measures focus in one way or another on the individual's depletion of emotional resources as the core meaning of burnout, less agreement exists about the number and the nature of the other burnout dimensions involved.

15.4.1 Maslach Burnout Inventory

Despite the variety of burnout measures, two instruments are used most frequently. The most popular instrument, the MBI (Maslach and Jackson, 1986), contains three scales: emotional exhaustion, depersonalization and (reduced) personal accomplishment. The psychometric quality of the MBI is encouraging, at least in human services samples: the three scales are internally consistent and the three-factor structure has been confirmed in various studies (Schaufeli, Enzmann and Girault, 1993). However, in other samples, the depersonalization items (which pertain to co-workers instead of recipients) do not form a coherent or meaningful factor (Evans and Fischer, 1993). The core symptom of burnout—emotional exhaustion—is the most robust scale of the MBI, and is strongly related to other burnout measures (convergent validity). Paradoxically, as noted before, it is also the least specific scale, and cannot easily be distinguished from related concepts such as depression (discriminant validity). Similar positive psychometric results have been obtained with the French (Dion and Tessier, 1994), German (Büssing and Perrar, 1992; Enzmann and Kleiber, 1989) and Dutch (Schaufeli and Van Dierendonck, 1993) versions of the MBI. Moreover, the cross-national validity of the MBI in these three European countries has been demonstrated (Enzmann, Schaufeli and Girault, 1994).

15.4.2 Burnout Measure

The second most widely employed burnout questionnaire is the Burnout Measure (BM) (Pines and Aronson, 1988), originally denoted the Tedium Measure (Pines and Aronson, with Kafry, 1981). In contrast to the MBI, the BM is also appropriate for measuring burnout outside the human services professions. The BM is a valid and reliable questionnaire, which assesses the person's level of physical, emotional and mental exhaustion (Schaufeli, Enzmann and Girault, 1993). Recently, the one-

dimensionality of the BM has been questioned by Enzmann and Kleiber (1989), who found three dimensions in their German sample (demoralization, exhaustion and loss of motivation). Their results have been confirmed in The Netherlands by Schaufeli and Van Dierendonck (1993).

15.4.3 Levels of Burnout

It must be emphasized that there are no clinically valid cut-off points available for the BM and the MBI that allow differentiation between levels of burnout. The MBI test manual only presents numerical cut-off points based on arbitrary statistical norms. The test authors divided the normative sample into three equally sized groups of 33.3%, assuming that the top, intermediate and bottom thirds of the samples would experience 'high', 'average' and 'low' levels of burnout, respectively (Maslach and Jackson, 1986, p. 3). Although the test authors correctly warn that this classification should not be used for diagnostic purposes, there is a strong tendency for some researchers to differentiate burnout cases from non-cases (e.g. Ackerley et al., 1988; Firth et al., 1985). Clearly this is an inappropriate approach, not only since the cut-off points are based on arbitrary statistical norms, but also because they are computed from a composite convenience sample that is not representative for the US human services. Recently, Schaufeli and Van Dierendonck (1955) showed that, as expected, levels of burnout are significantly higher in an outpatient sample compared to working samples. Moreover, levels of emotional exhaustion, depersonalization and personal accomplishment were significantly higher in the American normative MBI sample than in the Dutch normative sample. Thus, extreme caution is required when cut-off points are used to classify subjects according to their level of burnout: only nation-specific and clinically validated cut-off points should be employed.

15.5 CORRELATES, SYMPTOMS AND CONSEQUENCES OF BURNOUT

In the past decades, many personal and organizational factors have been found to be related to burnout, and a large variety of burnout symptoms and consequences of burnout has been described. Before discussing the empirical evidence on this issue, it must be noted that although the quality of burnout research has increased over the years, most studies of the past two decades lack methodological rigour. As noted by Kilpatrick (1989, p. 42), "The "typical" burnout study may be described as a one-shot, paper-and-pencil survey using a convenience sample to obtain individual self-report information". Therefore, the empirical results that are described below should be interpreted with some caution. For reasons of clarity not all references are included; sometimes only the most recent or methodologically most rigorous studies are mentioned (for more detailed reviews see Burisch, 1989; Cordes and Dougherty, 1993; Kahill, 1988; Schaufeli, 1990, Shirom, 1989).

15.5.1 Correlates of Burnout

Demographic Characteristics

Most studies do not systematically investigate demographic differences in burnout. Nevertheless, burnout—at least in the USA—seems to occur most frequently among young employees aged under 30 or 40, who have relatively little work experience (e.g. Byrne, 1991). However, these results must be interpreted with some caution because of selective dropout. It is quite likely that employees who are burned out have left—or had to leave—their jobs, so that the remaining group of older and more experienced employees—the 'survivors'—is relatively healthy. This so-called 'healthy worker effect' has often been observed in studies on job stress (Karasek and Theorell, 1990). Quite remarkably, in European countries, such as The Netherlands, burnout is more prevalent in older age groups (Schaufeli and Van Dierendonck, 1994). Probably, European employees are more reluctant to change jobs because cultural values and social security systems restrict labour market mobility more than in the USA.

Initially, it was claimed that women report higher burnout levels than men (Etzion and Pines, 1986). However, as Greenglass (1991) has pointed out, gender is often confounded with occupational role and hierarchical position. For instance, compared to men, women less frequently occupy supervisory roles in organizations and so they have less access to job-related rewards such as high income, social status and autonomy. When these confounding variables are taken into account, no significant gender differences in burnout are observed, except for depersonalization. It is consistently found that males report higher depersonalization scores than females, a finding that is in line with other gender differences such as higher prevalence of aggression among males, and higher interest in the nurturing role among females (Ogus, Greenglass and Burke, 1990).

Burnout is associated with higher levels of education (Maslach and Jackson, 1981). This is quite remarkable since most stress-related problems seem more prevalent among workers with low status and poor education (Fletcher, 1988). Finally, most studies show that single people have an increased risk of burning-out compared to those living with a partner (Maslach and Jackson, 1985). It is claimed that social support from the partner might alleviate stress.

Job Characteristics

Some studies indicate that burnout is positively related to objective indicators of workload, such as the number of pupils for classroom teachers (DePaepe, French and Lavay, 1985), intensity of technology use for intensive-care nurses (Schaufeli, Keijsers and Reis Miranda, 1995), case-load for social workers (Koeske and Koeske, 1989) and psychologists (Skorupka and Agresti, 1993) and number of working hours per week for nurses (Landsbergis, 1988). Most research, however, is on subjective

workload. It has been convincingly shown that perceived stress is positively related to burnout (Poulin and Walter, 1993). This is not surprising, since, conceptually speaking, both variables are very close.

Role problems, more specifically role ambiguity and role conflict, are positively related to burnout in members of many professions, such as nurses (Chiriboga and Bailey, 1986), teachers (Fimian and Blanton, 1987), correctional officers (Whitehead, 1989), personnel workers (Hopstaken and Buunk, 1989), and social workers (Himle, Jayarathne and Chess, 1987). Recently, the negative effects of role conflict and role ambiguity on burnout have been confirmed in a longitudinal study among human services professionals (Lee and Ashforth, 1993a).

A third job characteristic that is clearly positively related to burnout is lack of autonomy (Landsbergis, 1988). Similar, but somewhat weaker, positive effects have only occasionally been found for remaining job characteristics such as lack of feedback (Aström et al., 1990), monotony (Büssing and Perrar, 1992), lack of participation in decision making (O'Driscoll and Schubert, 1988), lack of responsibility (Dolan and Reinaud, 1992), poor opportunity for skill use (Richardsen, Burke and Leiter, 1992) and poor physical work conditions (Friedman, 1991).

The above mentioned job characteristics relate not only to the occurrence of burnout, but also to a variety of other health-related outcomes (Warr, 1987). In addition, two specific job characteristics have been identified for burnout: (i) a bureaucratic work organization and (ii) emotionally demanding relationships with recipients. For instance, psychotherapists from outpatient clinics showed higher levels of burnout than their independent colleagues who did not work in a bureaucratic environment (Radquepaw and Miller, 1989). The effect of emotionally charged relationships is illustrated by a recent study by Van Dierendonck, Schaufeli and Sixma (1994), which showed in a sample of general practitioners that harassment by patients was indirectly related to burnout through feelings of inequity (i.e. the imbalance of investments and outcomes in the relationships with patients).

Iob-Related Attitudes

Of all job-related attitudes, job dissatisfaction is the most highly and consistently positively related to burnout (Friesen and Sarros, 1989). In a longitudinal study among teachers, Wolpin, Burke and Greenglass (1991) showed that burnout leads to job dissatisfaction rather than the other way around. In a somewhat similar vein, employees who have elevated burnout scores report strong intentions to quit their jobs (Himle, Jayarathne and Chess, 1987).

Typically, burnout occurs in individuals who are strongly personally involved in their work with recipients but who are *not* involved in their jobs (Eisenstat and Felner, 1984). Most probably, being involved in one's work with recipients is emotionally demanding and might thus be related to burnout. Higher levels of burnout are also observed among employees who are *poorly* committed to their organization (e.g. Richardsen, Burke and Leiter, 1992). Thus, burnout is frequently

observed among employees who do not care about their jobs or their organizations: they have withdrawn themselves cognitively. Recently, Reilly (1994) showed that commitment moderates the relationship between work stressors and emotional exhaustion: highly committed nurses are more sensitive to work stressors than nurses who are low in commitment. Thus, nurses who identify with the values and goals of their profession may react more strongly when distracted from their ideals. Finally, unrealistic and high expectations about the job are found to be positively related to burnout (Stevens and O'Neil, 1983).

Social Environment

The social environment in which burnout occurs includes not only recipients, but co-workers, supervisors and probably subordinates as well. An abundance of empirical studies confirms the negative relationship between burnout and social support. There is longitudinal evidence for a main or direct effect of social support (Dignam, Barrera and West, 1986; Kruger, Botman and Goodenow, 1991; Poulin and Walter, 1993), as well as for an indirect or stress-buffering effect (Jayarathne, Himle and Chess, 1988). In the latter case, social support has a beneficial effect on burnout but exclusively in the presence of a stressor, whereas in the former case a positive effect is observed, irrespective of the presence or absence of any particular stressor. It seems that support from supervisors is more effective in alleviating burnout than support from co-workers (Constable and Russell, 1986).

Moreover, poor team cohesion (Kruger, Botman and Goodenow, 1991) and interpersonal conflicts at work (Leiter, 1991) are positively related to burnout. Hence, the quality of the interactions with co-workers is important. In a similar vein, some limited empirical evidence has been found for the existence of a 'burnout culture' (Golembiewski and Munzenrider, 1988, pp. 156–157): the concentration of burned-out employees in particular work groups. Some indications have been found that task-orientated leadership style is positively related to burnout, whereas a more social-orientated style is negatively related to burnout (O'Driscoll and Schubert, 1988).

Personality Characteristics

Most personality characteristics that have been associated with burnout are known from the general stress literature (see Chapter 3, this volume): lack of hardiness (McCranie, Lambert and Lambert, 1987), external locus of control (Keane, Ducette and Adler, 1985), type A behaviour (Nagy and Davis, 1985), poor personal control (Papadatou, Anagnostopoulos and Monos, 1994), neuroticism (McCranie and Brandsma, 1988), trait-anxiety (Richardsen, Burke and Leiter, 1992) and poor self-esteem (Poulin and Walter, 1993). In addition, it has been observed that particular ways of coping, most notably defensive strategies such as escape or avoidance, are positively related to burnout (Thornton, 1992), whereas control

orientated coping strategies are negatively related to burnout (Koeske, Kirk and Koeske, 1993).

A small set of personality characteristics that pertain to the relationship with recipients seems to be typical for burnout. For instance, Garden (1989) found that burnout is associated with the Jungian 'helping type', which is over-represented in the human services and is characterized by a need for affiliation, a capacity for warmth and a desire for harmony. Furthermore, positive associations with burnout have been found with empathy (Williams, 1989) and with poor communal orientation: a desire to give and receive benefits in response to the needs of others (Van Yperen, Buunk and Schaufeli, 1992).

15.5.2 Symptoms and Consequences of Burnout

Some confusion exists about the difference between the symptoms and the consequences of professional burnout. For example, is reduced personal accomplishment a symptom or a consequence of burnout? This type of confusion was particularly obvious in the pioneer phase, when clinical observations prevailed. In the empirical phase, when standardized instruments were used to assess burnout, it became easier to make this distinction. Nevertheless, the distinction remains rather arbitrary since it depends on the conceptualization and operationalization of burnout. For instance, some burnout measures include physical symptoms as well as organizational behaviours that may be the consequence of burnout, whereas others do not (Schaufeli, Enzmann and Girault, 1993). Hence, making a distinction between symptoms and consequences of burnout boils down to drawing an arbitrary line. In fact, both symptoms and consequences can be viewed as manifestations of burnout.

More than one hundred symptoms and consequences have been associated with burnout, ranging from anxiety to lack of zeal (Schaufeli, 1990). Although the number and the variety of these phenomena look rather impressive at first glance, it should be noted that many symptoms come from uncontrolled clinical observations or from interview studies with an impressionistic or unspecified analysis of the data.

Manifestations of burnout can be grouped for convenience into six major categories: mental, physical, behavioural, social, attitudinal and organizational.

Mental Manifestations

Typically, the burned-out person's emotional resources are exhausted and he or she feels 'empty', 'trapped' and 'at the end of the rope'. Affective symptoms that relate to depression are most prominent (i.e. depressed mood, helplessness, hopelessness and meaninglessness) (Leiter, in press). A sense of failure, insufficiency and impotence is observed, which eventually leads to poor self-esteem. The second type of affective symptom relates to aggression and anxiety (Kahill, 1988). The burned-out person's

frustration tolerance is diminished. He or she is irritable, over-sensitive, and behaves in a hostile or suspicious manner, not only towards recipients, but also towards colleagues and superiors. In addition, cognitive symptoms (e.g. inability to concentrate, forgetfulness, difficulties in decision making) and sensori-motor symptoms (e.g. nervous tics, restlessness, inability to relax) may be observed (Kahill, 1988). These cognitive and sensori-motor symptoms are signs of high arousal and nervous tension.

Physical Manifestations

All kinds of indefinite physical complaints are observed, such as headaches, nausea and muscle pains, particularly lower back pain (e.g. Belcastro, 1982). In addition, sexual problems, sleep disturbances, loss of appetite and shortness of breath are reported by individuals who suffer from burnout (Kahill, 1988). However, the most typical physical manifestation of burnout is chronic fatigue (Shirom, 1989). Various psychosomatic disorders seem to develop, such as ulcers, gastro-intestinal disorders and coronary heart disease (Belcastro, Gold and Grant, 1982). Less serious but more frequently occurring are prolonged colds and flu that cannot be shaken off (Paine, 1982). It must be noted that virtually all studies have used self-report measures of manifestations of burnout. To date, only one empirical study exists that shows that burnout is associated with objectively measured physical symptoms (i.e. risk-factors for cardiovascular disease; Melamed, Kushnir and Shirom, 1992). In addition, virtually no study has employed an adequate longitudinal design. An exception is Wolpin (1986), who showed that, after one year, burned-out teachers report significantly more somatic complaints than teachers who were not considered burned-out

Behavioural Manifestations

Individual behavioural manifestations are mainly caused by the person's increased level of arousal (e.g. hyperactivity, violent outbursts). An increased consumption of stimulants like coffee and alcohol (Quattrochi-Tubin, Jones and Breedlove, 1982) is observed, as well as substance abuse (Nowack and Pentkowski, 1994). In addition, particular health habits such as physical activity and adequate diet are negatively related to burnout (Nowack, Hanson and Gibbons, 1985).

Social Manifestations

Interpersonal problems at work occur with recipients, colleagues, supervisors and subordinates (Pines and Maslach, 1978). Typically, the burned-out individual withdraws from social contacts and is in danger of isolating himself or herself. Physical as well as mental withdrawal from others is observed (Maslach and Pines, 1977). One of the most obvious characteristics of burnout is the decreased

involvement with recipients. This is illustrated by the so-called 'John Wayne syndrome' that is observed among police officers: playing the tough guy who is not moved or touched by anything he gets involved in during his duty. Burned-out individuals might take their work problems home: negative spillover (Jackson and Maslach, 1982). These problems come to dominate family life and might increase interpersonal conflicts with spouse and children.

Attitudinal Manifestations

In addition to exhaustion, a dehumanizing, callous, detached, indifferent and cynical attitude towards recipients is the most characteristic sign of burnout: 'That ulcer from room 34' (Cummings and Nall, 1983). Such negative attitudes are particularly striking since initially the relationship with recipients has been characterized by involvement, empathy, concern and understanding (Pines and Kafry, 1978). By derogating and stereotyping recipients, and by making sick jokes, one creates a psychological distance which protects or enhances the self (Maslach, 1982a). Negative attitudes might also develop towards the job or the organization (Richardsen, Burke and Leiter, 1992). The person's initial intrinsic motivation has vanished; his or her zeal, enthusiasm, interest and idealism are lost. When the challenge of the job dissipates, boredom and dissatisfaction develop (Jayarathne and Chess, 1983). Burned-out individuals do not feel appreciated by either the organization or by their colleagues. They have lost their concern for the organization and now they are hypercritical, distrusting management, peers and supervisors.

Organizational Manifestations

There exists some limited longitudinal evidence that burnout causes intention to quit, turnover and absenteeism (Firth and Britton, 1989; Jackson, Schwab and Schuler, 1986). Lowered individual productivity has been found among burned-out individuals (Golembiewski and Munzenrider, 1988). On the other hand, the efficiency of intensive-care units has been found to be better when the average level of burnout was higher among the nurses (Schaufeli, Keijsers and Reis Miranda, 1995). Probably burned-out nurses are more obsessive and may therefore make the unit run more efficiently. In that case, it may be hypothesized that these nurses show the negative effects of burnout off the job. In other cross-sectional studies burnout has been associated with tardiness, personal injuries and accidents, employee theft, neglect and on-the-job mistakes (Kahill, 1988).

15.5.3 General Conclusions

Results from empirical research on the correlates and manifestations of burnout are quite difficult to interpret because the field is rather scattered and the research

findings often contradict each other. Most probably this is due to sampling bias, the use of poorly validated measures, inadequate research designs and—last but not least—the complexity of the relationships involved. Nevertheless, it appears that factors in the work environment, most notably workload and role problems, as well as job dissatisfaction and lack of social support, are most strongly and consistently related to burnout. The strength of these relationships is moderate, with Pearson correlation coefficients of about .40. Generally, associations with other variables, including personality characteristics and biographical features, are less strong (.20 < r < .30).

Concerning the symptoms and consequences of burnout, it seems quite clear that the mental, physical and behavioural manifestations are rather unspecific general stress reactions. They can, for instance, also be observed after stressful life events like unemployment or the death of a spouse. The specificity of the burnout syndrome lies, in addition to its work-relatedness—the organizational manifestations—in the combination of generic stress reactions with specific social and attitudinal symptoms.

Finally, it must be noted that the relatively few longitudinal studies, mentioned earlier, point to three important conclusions that offer a refined perspective on the aetiology and consequences of burnout. Firstly, lack of social support and role problems are antecedents of burnout. Secondly, physical symptoms, job dissatisfaction, absenteeism, turnover and lowered productivity may be consequences of burnout. In addition, it seems that burnout is more a chronic than an acute state. Longitudinal studies show that levels of burnout do not change very much across periods of up to two years (Burke and Greenglass, 1991; Capel, 1991; Golembiewski, Deckard and Rountree, 1989; Greenglass and Burke, 1990; Poulin and Walter, 1993; Wade, Cooley and Savicki, 1986; Wolpin, 1986).

15.6 THEORETICAL APPROACHES

Since burnout appeared on the stage first and foremost as a social problem, and not as a scholarly construct, the main purpose was to find practical ways to combat burnout rather than to understand the phenomenon from a theoretical point of view. However, as the number of empirical studies rose sharply, the theoretical interest in burnout increased. Initially, most theorizing was rather speculative and eclectic, borrowing concepts from various psychological theories. Recently, more systematic theoretical approaches have been developed, some of which are—at least partly—confirmed by empirical studies (Schaufeli, Maslach and Marek, 1993). Nevertheless, a comprehensive theoretical framework for burnout is still lacking. Probably, a single general and valid theory of burnout will always remain an illusion in view of the complexity of the phenomenon.

This section distinguishes three theoretical approaches to burnout: (i) individual approaches, emphasizing the role of intra-personal processes, (ii) interpersonal approaches, focusing particularly on the unbalanced relationships that exist between caregivers and recipients, and (iii) organizational approaches, stressing the relevance of the wider organizational context for understanding burnout. Of course,

these three types of approaches are not mutually exclusive, and they differ mainly in the extent to which they stress the importance of a particular type of factor in the development of the burnout syndrome.

15.6.1 Individual Approaches

Without exception, the six individual approaches below are speculative since they are not yet supported by empirical evidence. The first two approaches are mainly descriptive; the remaining individual approaches are attempts to analyse burnout from more general psychological perspectives that are either traditional (psychoanalysis and learning theory) or more recent (action theory and conservation of resources theory). In one way or another, all individual approaches emphasize the relevance of the discrepancy between expectations and reality.

Burnout as Failure to Retain one's Idealized Self-Image

According to Freudenberger (1980), burnout ('the super-achiever sickness') develops when individuals firmly believe in their idealized images of themselves as charismatic, dynamic, inexhaustible and supercompetent persons. As a result, they lose touch completely with their other, more fallible, 'real' selves. In vigorously trying to uphold their idealized self-images, burnout candidates typically use the wrong strategies, which further deplete their emotional resources. These 'false cures' are summarized by Freudenberger in four Ds: disengagement, distancing, dulling and deadness.

Burnout as Progressive Disillusionment

The basic tenet of Edelwich and Brodsky's (1980) approach is that the idealistic expectations of the 'helpers' are frustrated. Although they recognize several other built-in sources of frustration in the human services (e.g. lack of criteria for measuring accomplishment, low pay, poor career prospects, inadequate institutional support, low social status), the crucial role of initial unrealistic expectations and noble aspirations is highlighted. According to Edelwich and Brodsky, four stages of progressive disillusionment characterize the burnout process: (i) enthusiasm, (ii) stagnation (iii) frustration, and (iv) apathy. A somewhat similar process has been described by Veninga and Spradley (1981).

Burnout as a Narcissistic Disorder

According to Fischer (1983), individuals who have idealized their jobs and suffer subsequent disillusionment could either reduce their ideals or leave the situation. However, neither option is acceptable to burnout candidates. Instead of giving up or

reducing their ideals, or looking for another job, they redouble their efforts in order to achieve their unrealistic objectives. They are motivated by the fear of having to give up their narcissistic 'illusion of grandiosity', the erroneous notion of being special and superior. The burnout candidate's basic sense of self-esteem is grounded in this narcissistic illusion. Accordingly, when a choice has to be made between giving up the illusion of grandiosity or exhausting one's resources, the burnout candidate opts for the latter.

Burnout as a Pattern of Wrong Expectations

From the perspective of learning theory, burnout results from wrong expectations with respect to: (i) reinforcements, (ii) outcomes and (iii) efficacy (Meier, 1983). Reinforcement expectations are descriptions about whether certain work outcomes will meet one's goals. For example, a teacher might prefer to work with motivated students who frequently ask questions. If these goals are too high, reinforcement expectations are not met and burnout might develop. Outcome expectations are defined as descriptions about which behaviours will lead to certain outcomes. For instance, a teacher may experience burnout because of experiences that create the expectation that a class of students 'simply cannot learn the material', thus drowning any hope for positive reinforcement from that class. Finally, efficacy expectations refer to personal competence in executing the desired behaviour. For instance, teachers can burn out because they feel that they lack the personal competence necessary to teach adequately. Meier (1983) emphasizes that these three expectations strongly depend on social and personal factors. For instance, group norms and personal beliefs have a major impact on a person's expectations, and thus, indirectly, on the burnout process.

Burnout as Disturbed Action Process

Following German action theory, Burisch (1989, 1993) considers the action episode as the basic unit of analysis of his action model of burnout. The individual's latent motives lie at the core of action episodes that are activated by some perceived situation. In order to reach the incentive, the actor engages in some action (that is, goal directed behaviour). When the necessary cognitive and behavioural steps are taken and the goal is attained, the motive becomes temporarily satiated. In that case, the action episode is considered satisfactorily completed. However, according to Burisch, action episodes may be disturbed in four different ways. Some obstacle may interfere with goal attainment, either calling for unexpected high investments (goal impediment) or blocking the goal altogether (motive thwarting). Alternatively, the goal may be obtained, but the rewards fail to meet expectations (insufficient reward). Finally, unexpected negative side effects may occur. Disturbed action episodes result in 'first-order stress', which may develop into 'second-order stress' when attempts to remedy the situation repeatedly fail. Coping with second-order stress and the

concomitant loss of autonomy may be successful and lead to personal growth, enhanced competence and so on. On the other hand, when coping fails a burnout process is triggered: motives (e.g. of being an effective helper) may inflate or extinguish, action planning may become inadequate, aspiration levels may shift downwards, feelings of self-efficacy may decrease and demoralization may set in.

Burnout as Loss of Coping Resources

Conservation of resources (COR) theory is a basic motivational theory that postulates that stress occurs: (i) when resources are threatened, (ii) when resources are lost or (iii) when individuals invest in resources without the expected pay-off (Hobfoll, 1989). Resources are defined rather broadly as valued objects (e.g. clothing, furniture), conditions (e.g. employment, quality marriage), personal characteristics (e.g. social skills, hardiness) and energies (e.g. stamina, knowledge). Since the basic tenet of COR theory is the utilization of resources, and burnout is characterized by resource depletion, the COR perspective seems quite relevant for understanding burnout. According to Hobfoll and Freedy (1993), burnout is more likely to occur when resources are lost than when resources are not gained. They call this the 'primacy of loss' and the 'secondary importance of gain', respectively. For instance, for teachers, negative interactions with pupils, parents and administrators—which imply losses on the interpersonal level—are more salient than the everyday gains they receive from their job. When loss occurs, or when resources are threatened, people are motivated to use their coping skills in order to regain resources or to prevent losses. Viewed from this perspective, burnout—the depletion of emotional resources—can be considered the ultimate price that has to be paid for the individual's active attempts to regain resources or to prevent their loss.

15.6.2 Interpersonal Approaches

The following two interpersonal approaches highlight the importance of emotional demands in relationships with recipients, and the dynamics of social relationships at the workplace. Traditionally, emotionally demanding interpersonal relationships of professional caregivers with recipients have been considered to be the root cause of burnout. However, it is important to broaden the social context and to include relationships with others at the workplace as well, such as superiors and co-workers. Both interpersonal approaches are described in somewhat more detail because they have received, at least partly, empirical support.

Burnout as a Phased Reaction to Emotional Demands

According to Maslach (1982a, 1993), the burnout syndrome is initiated by emotionally demanding relationships between caregivers and their recipients.

Particularly in the human services, these relationships are stressful by their very nature since professionals are confronted with people's needs, problems and suffering. This puts a heavy psychological burden on them, which may drain their emotional resources, eventually leading to emotional exhaustion, the first phase in the burnout process. However, in order to cope with the emotional stresses, professionals generally develop an attitude of 'detached concern'; they learn to distance themselves from recipients in order to help them better. Unfortunately, this survival strategy, which in fact is a professional skill, does not develop adequately in every professional. Some of them overreact and develop an impersonal, negative, callous and cynical attitude, in which initial concern has given way to complete detachment. This so-called depersonalization constitutes the second phase of the burnout process. It is considered to be a defensive coping strategy for dealing with feelings of emotional exhaustion. This strategy further deteriorates the relationships with recipients. Instead of reducing emotional strain, depersonalization increases exhaustion. At that point, when the professional is continuously unsuccessful in achieving his or her professional goals, because relationships with recipients have become impoverished, feelings of reduced personal accomplishment may develop. This third and final phase completes the downward spiral: diminished accomplishment further increases emotional exhaustion, and, consequently, depersonalization.

The results of three earlier cross-sectional studies partly agree with this sequential model of burnout (Leiter, 1988; Leiter and Maslach, 1988; Leiter and Meechan, 1986). More particularly, the expected positive associations between emotionally demanding relationships with recipients and emotional exhaustion, and between emotional exhaustion and depersonalization have been confirmed. Byrne (1994). who employed causal modelling techniques to test the sequential model of burnout on cross-sectional data, confirmed the model in three independent teacher samples. However, recent work by Leiter (1990, 1991, 1993) supports a mixed sequential and parallel model of burnout. His 'developmental model' defines emotional exhaustion as a reaction to occupational stressors, of which work overload and interpersonal conflict are among the most prominent. In Leiter's model, depersonalization is a function of emotional exhaustion, as outlined above. This means that emotional exhaustion mediates most of the impact of environmental conditions on depersonalization. In contrast to the original phased reaction model of Maslach (1982a), Leiter's developmental model does not depict personal accomplishment as a function of depersonalization. Rather, personal accomplishment is positively influenced by the presence of resources such as social support, opportunities for skill enhancement and participative decision making. Accordingly, two processes seem important: (i) a sequential process, in which interpersonal work demands play a major role and which leads to depersonalization through exhaustion, and (ii) a parallel process, which is dominated by lack of resources and leads to diminished personal accomplishment. A recent longitudinal study across eight months confirmed the first process, as well as the somewhat independent role of personal accomplishment (Lee and Ashforth, 1993b). The latter has been observed in cross-sectional studies as well (e.g. Byrne, 1994; Koeske and Koeske, 1989).

Burnout as a Result of Social Comparison and Social Exchange Processes

Basing themselves on social comparison theory (Schachter, 1959) and equity theory (Walster, Walster and Berscheid, 1978), the central thesis of Buunk and Schaufeli (1993) is that burnout develops primarily in the social context of a work organization. In order to understand burnout, attention has to be paid to the way in which individuals compare their own responses and feelings with those of others at work, and to how they evaluate their psychological outcomes of and investments in the relationships with the recipients.

By definition, the relationship between caregiver and recipient is complementary, which is nicely illustrated semantically by the terms 'caregiver' and 'recipient'. The former gives, the latter receives. However, according to equity theory (Walster, Walster and Berscheid, 1978), people pursue reciprocity in interpersonal relationships: what they invest in and gain from a relationship should be proportional to the investments and gains of the other party in the relationship. Clearly, this is not the case in the human services: the caregiver-recipient relationship is unbalanced in terms of costs and benefits or investments and outcomes. This chronic disequilibrium, whereby caregivers continuously put much more into relationships with their recipients than they receive in return, may eventually deplete the professional's emotional resources. It can be inferred from equity theory that this lack of reciprocity and the resulting emotional exhaustion can be dealt with—among other ways-by lowering the recipients' outcomes; that is, by responding to them in a depersonalized way. Indeed, significant correlations have been found between perceptions of imbalance and burnout (particularly exhaustion and depersonalization) in several occupational groups, such as nurses (Schaufeli and Janzcur, 1994; Van Dierendonck and Schaufeli, 1993; Van Gorp, Schaufeli and Hopstaken, 1993), general practitioners (Van Dierendonck, Schaufeli and Sixma, 1994) and correctional officers (Schaufeli, Van den Eynden and Brouwers, 1994). The imbalance-burnout relationship seems to be moderated by personality factors. For example, Van Yperen, Buunk and Schaufeli (1992) found that nurses who felt that they invested highly in their relationship with patients showed elevated levels of burnout only when they were low in communal orientation, a personality characteristic that refers to a general responsiveness to the needs of others.

In addition to emphasizing the importance of social exchange processes, Buunk and Schaufeli (1993) argued, on the basis of social comparison theory, that human services professionals, who—by the nature of their work—are faced with high emotional demands, tend to compare their own emotional reactions to those of their co-workers. In particular, individuals under stress seek out others for reasons of self-evaluation in order to assess the appropriateness of their own reactions. Interestingly, Buunk and Schaufeli (1993) found, as predicted, that nurses who felt uncertain at work showed an increased desire to affiliate with others, but at the same time their actual affiliation decreased. They explain the latter tendency towards social isolation, which is typical of burnout, by pointing to the fear of embarrassment:

talking about one's doubts and uncertainties may be felt as admitting inferiority.

It appears that especially the *direction* of social comparison with co-workers is related to burnout. Upward comparison with others who are better off is associated with less emotional exhaustion, particularly among individuals with high levels of self-esteem (Buunk, Schaufeli and Ybema, 1994). Apparently, for these individuals their more competent co-workers act as positive role models who provide information on how to cope better with problems at work.

Finally, social comparison processes may contribute to the development and persistence of burnout in particular work units. Buunk and Schaufeli (1993) hypothesized that a process similar to emotional contagion may take place, in which individuals under stress perceive symptoms of burnout in their colleagues and take on these symptoms, reasoning that these symptoms are 'normal' given their stressful job situation. As expected, particularly those with a strong need for social comparison appeared to be especially sensitive to the perception of burnout symptoms, most notably emotional exhaustion (Groenestijn, Buunk and Schaufeli, 1992). Moreover, nurses who perceived these symptoms in their colleagues reported more burnout symptoms themselves.

Although the approach of Buunk and Schaufeli (1993) that considers the dynamics of the social relationships at work at various levels seems to be a fruitful way to study burnout, a longitudinal test of the hypotheses still stands out.

15.6.3 Organizational Approaches

Organizational approaches to burnout interpret the syndrome in terms of negative organizational behaviour, which affects not only the individual but also the organization. Three approaches are described, which differ in scope and in the degree to which they are supported by empirical evidence. The first approach focuses on burnout among young professionals, the second describes a phase model of progressive burnout, which has been successfully tested in various organizational settings, and the final approach considers burnout as the outcome of an unhealthy organization.

Burnout as Reality Shock

Cherniss (1980a,b) proposed a model of early career burnout based on interviews with human service professionals at the start of their career. The basic tenet of his model is that particular work setting characteristics interact with personal characteristics to produce particular stressors. Whether burnout develops depends on how professionals cope with these stressors: active problem solving is superior to defensive strategies such as avoiding. Accordingly, burnout is a process that develops over time and represents one way of adapting to particular sources of organizational stress.

Cherniss distinguishes between eight negative work setting characteristics:

- 1. the absence of an orientation or introduction programme for new employees
- 2. high workload
- 3. understimulation
- 4. limited scope of client contact
- 5. low level of autonomy
- 6. discrepancy between institutional goals and personal values
- 7. inadequate leadership and supervisory practices
- 8. social isolation

In addition, two kinds of personal characteristics are mentioned: resources outside of work and career orientation. The latter includes 'social activists' (who want to change the world), 'careerists' (who want to make money), 'artisans' (who are intrinsically motivated) and 'self-investors' (for whom the job is a necessary evil). According to Cherniss, the major sources of stress that are brought about by the interaction of work setting and person are: (i) uncertainty and doubts about one's competence, (ii) problems with recipients, (iii) bureaucratic infringement on one's autonomy, (iv) lack of challenge and fulfilment, and (v) lack of collegiality. In the process of adapting to these stressors, which are rather typical of the human services, Cherniss observed in young professionals negative changes in attitudes and outlook that are indicative of burnout: reduced aspirations and responsibility, loss of idealism, increased cynicism and pessimism, increased emotional detachment, withdrawal from work and growing concern with the self.

Cross-sectional studies among police officers (Burke, Shearer and Deszca, 1984) and teachers (Burke and Greenglass, 1989a) support the validity of the model. As expected, path analysis showed two significant indirect paths from work setting characteristics and personal characteristics to burnout, both through experienced sources of stress. In addition, significant direct paths were found from work setting and personal characteristics to burnout. Furthermore, Burke and Greenglass (1988) showed that teachers who described themselves as 'social activists' had the highest burnout scores, which is compatible with the view of burnout as a process of progressive disillusionment.

Cherniss (1989) re-interviewed the same professionals ten years after he developed his model in order to explore the relationship between the degree of burnout experienced during the first year of the career and career adaptation during the next decade. His results show that those who were more burned-out early in their careers were less likely to change careers and were more flexible in their approach to work. Thus, the follow-up study suggests that early career burnout does not lead to any significant negative long-term consequences.

Burnout as a Virulent Process

Essentially, the approach of Golembiewski and his colleagues is rather straightforward (Golembiewski and Munzenrider, 1988): they consider burnout as a virulent process that develops progressively through eight phases. It is claimed that the burnout

process might be set in motion by various different job stressors (e.g. overload, lack of autonomy, conflicts with co-workers or supervisors). Moreover, it is assumed that burnout leads to poor physical health, reduced productivity and poor work performance. Golembiewski agrees with the three-dimensionality of the burnout syndrome as proposed by Maslach (1982a) but does not agree with her sequential model. Instead, he distinguishes eight progressive phases of burnout. Depersonalization is considered the least important contributor to burnout, followed by lack of personal accomplishment and emotional exhaustion. Dichotomizing the distribution of MBI scale scores at the median as high and low generates eight phases of burnout (Table 15.1). It is important to note that although the virulence of burnout increases from phase I to phase VIII, individuals do not necessarily need to follow the successive stages. Since no theoretical rationale is presented, Golembiewski's approach remains purely descriptive.

The categorization in eight phases boils down to reducing all possible combinations of MBI scores (over 80 000!) on an eight-point scale. When depersonalization, reduced personal accomplishment and emotional exhaustion are assigned weights of 1, 2 and 4, respectively, and these weights are added for every phase, an eight-point rating scale emerges ranging from 0 (phase I) to 7 (phase VIII) (Burisch, 1989, p. 20). Accordingly, the phase model is heavily biased towards emotional exhaustion (Leiter, 1993).

Research based on the phase model in organizations has followed three lines. Most studies have attempted to validate the notion of progressive phases of burnout. Overall, these attempts have been quite successful: individuals in more advanced phases almost always report more negative work experiences (e.g. greater stress, less autonomy, more conflicts and role problems, less support) and more negative outcomes (e.g. job dissatisfaction, psychosomatic symptoms, higher turnover intentions, less job involvement, decreased productivity) (e.g. Burke and Deszca, 1986; Burke and Greenglass, 1989b; Golembiewski and Munzenrider, 1984; 1988; Golembiewski, Munzenrider and Carter, 1983). Some of these results have been replicated in cross-national studies (Golembiewski, Scherb and Boudreau, 1993). A second stream of research indicates that the incidence of burnout in various phases differs across organizations. For instance, the range of respondents in phase VIII varies from 6% to 29% (Golembiewski and Munzenrider, 1988). Moreover, burnout

Table 15.1 Progressive phases of burnout

| Factor* | 1 | 11 | 111 | IV | V | VI | VII | VIII |
|---------|-----|------|------|------|------|------|------|------|
| DEP | Low | High | Low | High | Low | High | Low | High |
| PA(r) | Low | Low | High | High | Low | Low | High | High |
| EE | Low | Low | Low | Low | High | High | High | High |

^{*} DEP=MBI depersonalization; PA(r)=MBI personal accomplishment (reduced); EE=MBI emotional exhaustion.

Source: Golembiewski, R.T. and Munzenrider, R.F. (1988) Phases of burnout: Developments in concepts and applications. Reproduced by permission of Greenwood Publishing Group Inc., Westport, CT.

tends to cluster in particular work groups: 83% of the employees in the most advanced phase are employed in work groups where more than 50% of their colleagues are assigned to an advanced phase as well (Rountree, 1984). Finally, phase assignments are fairly stable across time: 40% are assigned to the same phase one year later, whereas 55% move only one phase up or down (Golembiewski and Boss, 1991). Individuals moving to a lower burnout phase reported corresponding improvements in antecedents (i.e. work setting characteristics) and consequences (greater job satisfaction and fewer psychosomatic symptoms) (Burke and Greenglass, 1991).

Burnout as a Consequence of Organizational Unhealthiness

It is generally believed that the quality of the organization, of the work environment and of the work itself may affect the experience of stress and employee health. Following this line of reasoning, Cox, Kuk and Leiter (1993) assumed that the healthiness of the organization is related to the employees' level of burnout. They maintain that the healthiness of an organization is a reflection of the 'goodness' of its psychosocial subsystems and of their coherence and integration. More particularly, their study dealt with the school as subjective organization and suggested that three psychosocial subsystems could be distinguished: (i) the task environment, (ii) the problem solving environment and (iii) the developmental environment. It appeared that the quality of the task environment and of the problem solving environment were directly related to burnout. Moreover, evidence was found for a moderator effect of task and developmental environments on the relationship between teacher stress and burnout. This suggests that experiencing good task and developmental environments at school may attenuate the effects of work stress on burnout.

15.7 INTERVENTIONS

From the moment burnout was introduced in the early 1970s, there has been a vivid interest in interventions. There is an extensive, albeit kaleidoscopic and rather scattered, literature on burnout interventions, which suggests that virtually every approach from the occupational stress area can be used to prevent or reduce burnout. Essentially, two general approaches can be distinguished: individual interventions and workplace interventions (Ross and Altmaier, 1994). Although almost every author on the subject acknowledges that a combination of both approaches would be most effective, the vast majority of burnout interventions have been conducted on the individual level. A strictly individual approach to burnout creates the danger that a 'blame the victim' situation is created. This criticism clearly applies to the popular burnout workshops that combine several individual approaches. This concluding section briefly reviews individual and workplace interventions that have been applied to burnout, then discusses the results of empirical studies on the effectiveness of burnout interventions.

15.7.1 Individual and Workplace Interventions

Individual approaches to prevent or reduce burnout include cognitive-behavioural techniques such as stress inoculation training, rational emotive therapy, cognitive restructuring and behavioural rehearsal (Edelwich and Brodsky, 1980). A cognitively orientated approach is relevant because burnout often involves 'wrong' cognitions such as unrealistic expectations and false hopes. In addition, relaxation techniques and didactic stress management are often used to reduce burnout (Jaffe and Scott, 1989). The latter involves the presentation of theoretical information about burnout and includes techniques such as self-monitoring. Time management, physical training, dieting and increasing one's social skills, particularly assertiveness, have been recommended to combat burnout (Maslach, 1982b). In order to counteract the reality shock that is experienced by many new professionals, preparatory training programmes may provide them with more realistic images of their profession, instead of fostering wrong expectations (Cunningham, 1983). Mutual aid groups are advocated for self-help (Spicuzza and De Voe, 1982). Preferably these groups should be initiated by the professionals themselves, rather than by their management (Cherniss and Dantzig, 1986).

Only occasionally are workplace interventions explicitly carried out in order to reduce stress or burnout. Generally, other purposes are targeted such as increased productivity and efficiency, cost-effectivenes, smooth communication or organizational flexibility. Nevertheless, there is an increasing awareness that preventing stress at the workplace is important because of the high direct and indirect costs that are associated with it (International Labour Organization, 1992). As far as burnout is concerned, workplace interventions are even less specifically described than individual approaches.

Work redesign (i.e. job enlargement, job rotation and job enrichment) is mentioned as a major tool to decrease quantitative and qualitative workload (Pines and Maslach, 1978). Another way to reduce qualitative workload is to follow additional training courses (e.g. 'How to deal with violent clients'). Since many burnout candidates feel 'locked in' their careers, career development programmes and career counselling would be other organizational approaches to prevent burnout. Especially in order to avoid early career burnout, Cherniss (1980a) proposed an introductory mentorship system. Bidirectional communication between management and employees, adequate procedures for conflict management and participative decision making have been proposed as antidotes to burnout as well (Cherniss, 1980a). Moreover, social support from colleagues and superiors should be institutionalized in the form of regular consultations and meetings (Pines and Maslach, 1978). In addition, 'time-outs' and sabbatical leaves have been suggested in order to enhance recuperation from the daily stresses of the job (Pines and Kafry, 1982). Finally, Golembiewski, Hilles and Rick (1987) describe an organizational development (OD) approach to burnout that strengthened the workers' social network for participatory change through problem confrontation, group consolidation around problems and building consensus for change. According to Karasek and Theorell (1990, pp. 239-241), this approach essentially reduces job demands and increases worker control.

15.7.2 The Effectiveness of Burnout Interventions

With two notable exceptions, evaluation studies exclusively involve individually orientated programmes. Pines and Maslach (1980) describe a successful workplace intervention to reduce burnout by redesigning the jobs of professionals working at a day-care centre for children. Unfortunately, they do not present quantitative data. In contrast, Golembiewski, Hilles and Rick (1987) were able to show a positive effect on burnout and turnover rates of their organizational development programme, which was conducted in the human services department of a pharmaceuticals company. Unfortunately, the effect on burnout was not retained after the firm went through a process of reorganization.

The effectiveness of individual approaches to combating burnout has been studied somewhat more intensively. For instance, Freedy and Hobfoll (1994) used stress inoculation training among nurses to enhance their social support and individual mastery resources. Participants experienced significant enhancements in social support and mastery compared to the no-intervention control group. In particular, nurses with low initial levels on both resources showed significant reductions in emotional exhaustion and depression. Similar positive results were obtained by West, Horan and Games (1984), who used didactic stress management, training coping skills (i.e. relaxation, assertiveness, cognitive restructuring and time management) and exposure via role playing. A four-month follow-up showed that burnout (i.e. emotional exhaustion and reduced personal accomplishment) decreased significantly, as did anxiety and systolic blood pressure. More detailed analysis revealed that coping skills were the principal ingredient of the programme. In another controlled study, Higgins (1986) showed that learning palliative coping skills (i.e. progressive relaxation and systematic desensitization) was equally effective as cognitive and behavioural skills training (i.e. time management, assertiveness training and rational emotive therapy) in reducing levels of emotional exhaustion. However, Corcoran and Bryce (1983) showed that a behaviourally oriented human resource development programme was slightly superior to a more cognitively oriented microcounselling training programme in reducing levels of emotional exhaustion.

Pines and Aronson (1983) evaluated a one-day burnout workshop for employees of two social services, which combined several individual approaches, e.g. relaxation techniques, cognitive stress management, time management, social skills training, didactical stress management and attitude change. The participants' level of exhaustion decreased slightly but not significantly. However, compared to the control group, which did not participate in the workshop, satisfaction with co-workers went up significantly in the experimental group. Schaufeli (1995) evaluated a somewhat similar burnout workshop for community nurses but found that only the symptom levels (i.e. emotional exhaustion, psychological strain and somatic complaints) of the participating nurses decreased significantly. However, no significant changes were observed in levels of the attitudinal component of burnout (depersonalization and reduced personal accomplishment). In addition, it was observed that nurses who were rather resistant to stress benefited most from the

workshop. Finally, the effects of mutual aid groups were evaluated by two studies that consistently showed that levels of burnout did not decrease (Brown, 1984; Larson, 1986). However, participants were satisfied about the programme and about the group experience, and had become more content with their co-workers and superiors.

It is rather difficult to draw general conclusions about the effectiveness of individual burnout interventions since the evaluation studies use different samples, procedures, time frames, measurement instruments and training methods. Besides, some studies suffer from methodological inadequacies such as the lack of control groups and the small number of participants. Nevertheless, one major conclusion emerges: the core symptom of burnout—exhaustion—can be reduced by training professionals to use particular coping skills, most notably relaxation techniques and cognitive restructuring. On the other hand, personal accomplishment, and particularly depersonalization, seem rather resistant to change. Providing social support—as staff support groups do—does not seem to have a positive impact on burnout, although the programmes are evaluated positively and satisfaction with colleagues seems to increase.

15.8 CONCLUSION

Two decades after its introduction, burnout, which was initially recognized as a social problem, has developed into a prospering research area. The concept has successfully penetrated from practice into the realm of academic psychology. Some major achievements have been made. Most importantly, a consensual agreement has developed on an operational definition of burnout in the human services. This is exemplified by the almost universal use of the MBI as a measurement tool. In addition, this chapter shows that much progress has been made on the empirical as well as on the conceptual level. However, much work remains to be done. There is still a great need for research that is theory-driven, longitudinal and includes other than self-report measures. Moreover, valid tools for individual assessment have to be developed as well as specific—organizational—interventions. Finally, and most importantly, to date burnout has predominantly been studied among human services professionals. However, it becomes increasingly clear that workers from other occupational fields might suffer from the syndrome as well. Accordingly, our challenge for the coming years is to expand burnout research beyond the occupational area in which it first emerged.

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REFERENCES

- Ackerley, G.D., Burnell, J., Holder, D.C. and Kurdek, L.A. (1988) Burnout among licensed psychologists. *Professional Psychology: Research and Practice*, 19, 624-631.
- Aström, S., Nilsson, M., Norberg, A., Sandman, P.-O. and Winblad, B. (1990) Staff burnout in dementia care: relations to empathy and attitudes. *International Journal of Nursing Studies*, 28, 65-77.
- Belcastro, P.A. (1982) Burnout and its relationship to teachers' somatic complaints and illnesses. *Psychological Reports*, **50**, 1045-1046.
- Belcastro, P.A., Gold, R.S. and Grant, J. (1982) Stress and burnout: physiologic effects on correctional teachers. Criminal Justice and Behavior, 9, 387-395.
- Bradley, H.B. (1969) Community-based treatment for young adult offenders. Crime and Delinquency, 15, 359-370.
- Brill, P.L. (1984) The need for an operational definition of burnout. Family and Community Health, 6, 12-24.
- Brown, L. (1984) Mutual help staff groups to manage work stress. Social Work with Groups, 7, 55-66.
- Burisch, M. (1989) Das Burnout-Syndrom: Theorie der inneren Erschöpfung (The Burnout Syndrome: Theory of Internal Exhaustion). Springer-Verlag, Berlin.
- Burisch, M. (1993) In search of theory: some ruminations on the nature and etiology of burnout. In W.B. Schauseli, C. Maslach and T. Marek (eds) *Professional Burnout: Recent Developments in Theory and Research*. Taylor and Francis, London, pp. 75-94.
- Burke, R.J., Shearer, J. and Deszca, E. (1984) Correlates of burnout phases among police officers. Group and Organizational Studies, 9, 451-466.
- Burke, R.J. and Deszca, E. (1986) Correlates of psychological burnout phases among police officers. Human Relations, 39, 487-501.
- Burke, R.J. and Greenglass, E.R. (1988) Career orientations and psychological burnout in teachers. *Psychological Reports*, **63**, 107-116.
- Burke, R.J. and Greenglass, E.R. (1989a) Psychological burnout among men and women in teaching: an examination of the Cherniss model. *Human Relations*, 42, 261–273.
- Burke, R.J. and Greenglass, E.R. (1989b) Correlates of psychological burnout phases among teachers. Journal of Health and Human Resources Administration, 12, 46-62.
- Burke, R.J. and Greenglass, E.R. (1991) A longitudinal study of progressive phases of psychological burnout. *Journal of Health and Human Resources Administration*, 13, 390-408.
- Büssing, A. and Perrar, K.M. (1992) Die Messung von Burnout. Untersuchung einer Deutschen Fassung des Maslach Burnout Inventory (MBI-D) (The measurement of burnout: an investigation with the German version of the Maslach Burnout Inventory). *Diagnostica*, 38, 328-353.
- Buunk, A.P. and Schauseli, W.B. (1993) Burnout: a perspective from social comparison theory. In W.B. Schauseli, C. Maslach and T. Marek (eds) *Professional Burnout: Recent Developments in Theory and Research*. Taylor and Francis, London, pp. 53-73.
- Buunk, A.P., Schaufeli, W.B. and Ybema, J.F. (1994) Burnout, uncertainty and the desire for social comparison among nurses. *Journal of Applied Social Psychology*, 24, 1701–1718.
- Byrne, B.M. (1991) Burnout: investigating the impact of background variables for elementary, intermediate, secondary, and university educators. *Teaching and Teacher Education*, 7, 197-209.
- Byrne, B.M. (1994) Burnout: testing for validity, replication and variance of causal structure across elementary, intermediate, and secondary teachers. *American Educational Research Journal*, 31, 645-673.
- Capel, C. (1991) A longitudinal study of burnout in teachers. British Journal of Educational Psychology, 61, 36-45.
- Cherniss, C. (1980a) Staff Burnout: Job Stress in the Human Services. Sage, Beverly Hills, CA.

- Cherniss, C. (1980b) Professional Burnout in Human Service Organizations. Praeger, New York. Cherniss, C. (1989) Career stability in public service professionals: a longitudinal investigation based on biographical interviews. American Journal of Community Psychology, 17, 399-422.
- Cherniss, C. and Dantzig, S.A. (1986) Preventing and managing job related stress. In R.R. Kilberg, P.E. Nathan and R.W. Thoreson (eds) *Professionals in Distress: Issues, Syndromes, and Solutions*. American Psychological Association, Washington, DC, pp. 255-273.
- Chiriboga, D.A. and Bailey, J. (1986) Stress and burnout among critical care and medical surgical nurses: a comparative study. Critical Care Nursing Quarterly, 9, 84-92.
- Constable, J.F. and Russell, D.W. (1986) The effect of social support and the work environment upon burnout among nurses. Journal of Human Stress, 12, 20-26.
- Corcoran, K.J. and Bryce, A.K. (1983) Intervention in the experience of burnout: effects of skill development. *Journal of Social Service Research*, 7, 71-79.
- Cordes, C.L. and Dougherty, T.W. (1993) A review and an integration of research on job burnout. Academy of Management Review, 18, 621-656.
- Cox, T., Kuk, G., and Leiter, M.P. (1993) Burnout, health, work stress, and organizational healthiness. In W.B. Schauseli, C. Maslach and T. Marek (eds) *Professional Burnout: Recent Developments in Theory and Research.* Taylor and Francis, London, pp. 177-194.
- Cummings, O.W. and Nall, R.L. (1983) Relationships of leadership style and burnout to counselors' perceptions of their jobs, themselves, and their clients. *Counselor Education and Supervision*, 22, 227–234.
- Cunningham, W.G. (1983) Teacher burnout solutions for the 1980s: a review of the literature. The Urban Review, 15, 37-51.
- DePaepe, J., French, R. and Lavay, B. (1985) Burnout symptoms experienced among special physical educators. Adapted Physical Activity Quarterly, 2, 189-196.
- Dignam, J.T., Barrera, M. and West, S.G. (1986) Occupational stress, social support, and burnout among correctional officers. American Journal of Community Psychology, 14, 177-193.
- Dion, G. and Tessier, R. (1994) Validation de la traduction de l'Inventaire d'épuisement professionnel de Maslach et Jackson (Validation of the translation of the burnout inventory of Maslach and Jackson). Canadian Journal of Behavioral Science, 26, 210-227.
- Dolan, S.L. and Reinaud, S. (1992) Individual, organizational and social determinants of managerial burnout: a multivariate approach. *Journal of Social Behavior and Personality*, 7, 95-100.
- Edelwich, J. and Brodsky, A. (1980) Burn-out: Stages of Disillusionment in the Helping Professions. Human Services Press, New York.
- Eisenstat, R.A. and Felner, R.D. (1984) Toward a differential view on burnout: personal and organizational mediators of job satisfaction and stress. *American Journal of Community Psychology*, 12, 411-430.
- Enzmann, D. and Kleiber, D. (1989) Helfer-Leiden: Stress und Burnout in psychosozialen Berufen (Helper Ordeals: Stress and Burnout in the Human Services). Asanger, Heidelberg.
- Enzmann, D., Schaufeli, W.B. and Girault, N. (1994) The validity of the Maslach Burnout Inventory in three national samples. In L. Bennett, D. Miller and M. Ross (eds) Health Workers and AIDS: Research, Interventions and Current Issues. Harwood, London, pp. 131-150.
- Etzion, D. (1987) Burnout: the hidden agenda of human distress. Faculty of Management, Tel-Aviv University.
- Etzion, D. and Pines, A. (1986) Sex and culture in burnout and coping among human service professionals: a social psychological perspective. *Journal of Cross-Cultural Psychology*, 17, 191–209.
- Evans, B.K. and Fischer, D.G. (1993) The nature of burnout: a study of the three-factor model of burnout in human service and non-human service samples. *Journal of Occupational and Organizational Psychology*, **66**, 29–38.
- Fimian, M.J. and Blanton, L.P. (1987) Stress, burnout, and role problems among teacher trainees and first year teachers. *Journal of Occupational Behavior*, 8, 157-165.

- Firth, H. and Britton, P.G. (1989) 'Burnout', absence and turnover amongst British nursing staff. Journal of Occupational Psychology, 62, 55-60.
- Firth, H., McIntee, J., McKeown, P. and Britton, P.G. (1985) Maslach Burnout Inventory: factor structure and norms for British nursing staff. *Psychological Reports*, 57, 147-150.
- Firth, H., McIntee, J., McKeown, P. and Britton, P.G. (1986) Burnout and professional depression: related concepts? *Journal of Advanced Nursing*, 11, 633-641.
- Fischer, H.J. (1983) A psychoanalytic view on burnout. In B.A. Farber (ed.) Stress and Burnout in the Human Service Professions. Pergamon Press, New York, pp. 40-46.
- Fletcher, B. (1988) The epidemiology of occupational stress. In C.L. Cooper and R. Payne (eds) Causes, Coping and Consequences of Stress at Work. John Wiley & Sons, Chichester, pp. 3-52.
- Freedy, J.R. and Hobfoll, S.E. (1994) Stress inoculation for reduction of burnout: a conservation of resources approach. Anxiety, Stress and Coping, 6, 311-325.
- Freudenberger, H.J. (1974) Staff burnout. Journal of Social Issues, 30, 159-165.
- Freudenberger, H.J. (1975) The staff burnout syndrome in alternative institutions. *Psychotherapy: Theory, Research and Practice*, 12, 72–83.
- Freudenberger, H.J. (1980) Burnout: The Cost of High Achievement. Anchor Press, New York. Freudenberger, H.J. (1983) Burnout: contemporary issues, trends, and concerns. In B.A. Farber (ed.) Stress and Burnout in the Human Service Professions. Pergamon Press, New
- York, pp. 23-28. Friedman, I.A. (1991) High- and low-burnout schools: school culture aspects of teacher burnout. *Journal of Educational Research*, 84, 325-333.
- Friesen, D. and Sarros, J.C. (1989) Sources of burnout among educators. Journal of Organizational Behaviour, 10, 179-188.
- Garden, A.M. (1989) The effect of psychological type on research findings. Journal of Occupational Psychology, 62, 223-234.
- Glass, D.C., McKnight, J.D. and Valdimarsdottir, H. (1993) Depression, burnout and perceptions of control in hospital nurses. *Journal of Consulting and Clinical Psychology*, 61, 147-155.
- Golembiewski, R.T. and Boss, R.W. (1991) Shelving levels of burnout for individuals in organizations: a note on the stability of phases. *Journal of Health and Human Resources Administration*, 13, 409-420.
- Golembiewski, R.T. and Munzenrider, R. (1984) Active and passive reactions to psychological burnout: toward greater specificity in a phase model. *Journal of Health and Human Resources Administration*, 7, 264-268.
- Golembiewski, R.T. and Munzenrider, R.F. (1988) Phases of Burnout: Developments in Concepts and Applications. Praeger, New York.
- Golembiewski, R.T., Deckard, G.J. and Rountree, B.H. (1989) The stability of burnout assignments: measurement properties of the phase model. *Journal of Health and Human Resources Administration*, 12, 63-78.
- Golembiewski, R.T., Hilles, R. and Rick, D. (1987) Some effects of multiple OD interventions on burnout and work site features. *Journal of Applied Behavioral Science*, 23, 295-313.
- Golembiewski, R.T., Munzenrider, R. and Carter, D. (1983) Phases of progressive burnout and their work site covariates: critical issues in OD research and practice. *Journal of Applied Behavioral Science*, 19, 461-481.
- Golembiewski, R.T., Munzenrider, R.F. and Stevenson, J.G. (1986) Stress in Organizations. Praeger, New York.
- Golembiewski, R.T., Scherb, K. and Boudreau, R.A. (1993) Burnout in cross-national settings: generic and model-specific perspectives. In W.B. Schaufeli, C. Maslach and T. Marek (eds) Professional Burnout: Recent Developments in Theory and Research. Taylor and Francis, London, pp. 218-236.
- Greenglass, E. (1991) Burnout and gender: theoretical and organizational implications. Canadian Psychology, 32, 562-574.

- Greenglass, E.R. and Burke, R.J. (1990) Burnout over time. Journal of Health and Human Resources Administration, 13, 192-204.
- Groenestijn, E., Buunk, A.P. and Schaufeli, W.B. (1992) Het besmettingsgevaar bij burnout: De rol van sociale vergelijkingsprocessen (Symptom contagiousness and burnout: the role of social comparison processes). In R.W. Meertens, A.P. Buunk, P.A.M. van Lange and B. Verplanken (eds) Sociale psychologie en beïnvloeding van intermenselijke en gezondsheidsproblemen. Vuga, The Hague, pp. 88-103.
- Hallsten, L. (1993) Burning out: a framework. In W.B. Schauseli, C. Maslach and T. Marek (eds) *Professional Burnout: Recent Developments in Theory and Research*. Taylor and Francis, London, pp. 95–112.
- Higgins, N.C. (1986) Occupational stress and working women: the effectiveness of two stress reduction programs. *Journal of Vocational Behavior*, 29, 66-78.
- Himle, D.F., Jayarathe, S.D. and Chess, W.A. (1987) Gender differences in work stress among clinical social workers. *Journal of Social Service Research*, 10, 41-56.
- Hobfoll, S. (1989) Conservation of resources: a new attempt at conceptualizing stress. *American Psychologist*, 44, 513-524.
- Hobfoll, S.E. and Freedy, J. (1993) Conservation of resources: a general stress theory applied to burnout. In W.B. Schaufeli, C. Maslach and T. Marek (eds) *Professional Burnout: Recent Developments in Theory and Research*. Taylor and Francis, London, pp. 115-129.
- Hopstaken, L. and Buunk, A.P. (1989) 'Burnout' bij medewerkers personeelszaken: De relatie met hanteringsgedrag, rolproblematiek en gebrek aan controle ('Burnout' among personnel officers: relationships with coping, role problems and lack of control). Gedrag en Organisatie, 2, 17-32.
- International Labour Organization (1992) Conditions of Work Digest: Preventing Stress at Work (ed. V. Di Martino). International Labour Organization, Geneva.
- Jackson, S.E. and Maslach, C. (1982) After-effects of job related stress: families as victims. Journal of Occupational Behavior, 3, 63-77.
- Jackson, S.E., Schwab, R.L. and Schuler, R.S. (1986) Toward an understanding of the burnout phenomenon. *Journal of Applied Psychology*, 71, 630-640.
- Jaffe, D.T. and Scott, C.D. (1989) Self-Renewal: A Workbook for Achieving High Performance and Health in a High-Stress Environment. Simon and Schuster, New York.
- Jayarathne, S.D. and Chess, W.A. (1983) Job satisfaction and burnout in social work. In B.A. Farber (ed.) Stress and Burnout in the Human Services Professions. Pergamon Press, New York, pp. 129-141.
- Jayarathne, S.D., Himle, D.F. and Chess, W.A. (1988) Dealing with work stress and strain: is the perception of support more important than the issue? *Journal of Applied Behavioral Science*, 24, 191-202.
- Kahill, S. (1988) Symptoms of professional burnout: a review of the empirical evidence. Canadian Psychology, 29, 284-297.
- Karasek, R. and Theorell, T. (1990) Healthy Work: Stress, Productivity and the Reconstruction of Working Life. Basic Books, New York.
- Keane, A., Ducette, J. and Adler, D.C. (1985) Stress in ICU and non-ICU nurses. Nursing Research, 34, 231-236.
- Kilpatrick, A.O. (1989) Burnout correlates and validity of research designs in a large panel of studies. Journal of Health and Human Resources Administration, 12, 25-45.
- Kleiber, D. and Enzmann, D. (1990) Burnout: 15 Years of Research: An international bibliography. Hogrefe, Göttingen.
- Koeske, G.F. and Koeske, R.D. (1989) Construct validity of the Maslach Burnout Inventory: a critical review and reconceptualization. Journal of Applied Behavioral Science, 25, 131-144.
- Koeske, G.F., Kirk, S.A. and Koeske, R.D. (1993) Coping with job stress: which strategies work best? *Journal of Occupational and Organizational Psychology*, 66, 319-335.
- Kruger, L.J., Botman, H.J. and Goodenow, C. (1991) An investigation of social support and burnout among residential counselors. *Child and Youth Care Forum*, 20, 335–352.

- Landsbergis, P.A. (1988) Occupational stress among health care workers: a test of the job demands-control model. *Journal of Organizational Behavior*, 9, 217-239.
- Larson, D.G. (1986) Developing effective hospice staff support groups: pilot test of an innovative training program. The Hospice Journal, 2, 41-55.
- Lazarus, R.S. and Folkman, S. (1984). Stress, Appraisal and Coping. Springer-Verlag, New York. Lee, R.T. and Ashforth, B.E. (1993a) A longitudinal study of burnout among supervisors and managers: comparisons between the Leiter and Maslach (1988) and Golembiewski et al. (1986) models. Organizational Behavior and Human Decision Processes, 54, 369-398.
- Lee, R.T. and Ashforth, B.E. (1993b) A further examination of managerial burnout: toward an integrated model. *Journal of Organizational Behaviour*, 14, 3-20.
- Leiter, M.P. (1988) Burnout as a function of communication patterns: a study of multidisciplinary mental health team. *Group and Organization Studies*, 13, 111-128.
- Leiter, M.P. (1990) The impact of family resources, control coping and skill utilization on the development of burnout: a longitudinal study. *Human Relations*, 43, 1067-1083.
- Leiter, M.P. (1991) Coping patterns as predictors of burnout: the function of control and escapist coping patterns. *Journal of Organizational Behaviour*, 12, 123-144.
- Leiter, M.P. (1993) Burnout as developmental process: consideration of models. In W.B. Schaufeli, C. Maslach and T. Marek (eds) *Professional Burnout: Recent Developments in theory and research*. Taylor and Francis, London, pp. 237-250.
- Leiter, M.P. (in press) Perceived control, depressive symptomatology, and professional burnout: a review of the evidence, *International Review of Health Psychology*.
- Leiter, M.P. and Durup, J. (1994) The discriminant validity of burnout and depression: a confirmatory factor analytic study. Anxiety, Stress and Coping, 7, 357-373.
- Leiter, M.P. and Maslach, C. (1988) The impact of interpersonal environment on burnout and organizational commitment. *Journal of Organizational Behaviour*, 9, 297-308.
- Leiter, M.P. and Meechan, K.A. (1986) Role structure and burnout in the field of human services. Journal of Applied Social Science, 22, 47-52.
- Maslach, C. (1976) Burn-out. Human Behavior, 5, 16-22.
- Maslach, C. (1982a) Burnout: a social psychological analysis. In J.W. Jones (ed.) *The Burnout Syndrome: Current Research, Theory, Interventions.* London House Press, Parke Ridge, IL, pp. 30–53.
- Maslach, C. (1982b) Burnout: The Cost of Caring. Prentice Hall, Englewood Cliffs, NJ.
- Maslach, C. (1993) Burnout: a multidimensional perspective. In W.B. Schaufeli, C. Maslach and T. Marek (eds) *Professional Burnout: Recent Developments in Theory and Research*. Taylor and Francis, London, pp. 19-32.
- Maslach, C. and Jackson, S.E. (1981) The measurement of experienced burnout. *Journal of Occupational Behavior*, 2, 99-113.
- Maslach, C. and Jackson, S.E. (1984) Burnout in organizational settings. In S. Oskamp (ed.) Applied Social Psychology Annual, vol. 5. Sage, Beverly Hills, CA, pp. 133-154.
- Maslach, C. and Jackson, S.E. (1985) The role of sex and family variables in burnout. Sex Roles: A Journal of Research, 12, 837-851.
- Maslach, C. and Jackson, S.E. (1986) MBI: Maslach Burnout Inventory; Manual Research Edition. University of California, Consulting Psychologists Press, Palo Alto, CA.
- Maslach, C. and Pines, A. (1977) The burn-out syndrome in the day care setting. Child Care Quarterly, 6, 100-113.
- Maslach, C. and Schauseli, W.B. (1993) Historical and conceptual development of burnout. In W.B. Schauseli, C. Maslach and T. Marek (eds) Professional Burnout: Recent Developments in Theory and Research. Taylor and Francis, London, pp. 1-16.
- McCranie, E.W., Lambert, V. and Lambert, C. (1987) Work stress, hardiness and burnout among hospital staff nurses. *Nursing Research*, 36, 374-378.
- McCranie, E.W. and Brandsma, J.M. (1988) Personality antecedents of burnout among middle-aged physicians. Behavioral Medicine, 14, 30-36.
- Meier, S.T. (1983) Toward a theory of burnout. Human Relations, 36, 899-910.

- Meier, S.T. (1984) The construct validity of burnout. *Journal of Occupational Psychology*, 57, 211-219.
- Melamed, S., Kushnir, T. and Shirom, A. (1992) Burnout and risk factors for cardiovascular diseases. *Behavioural Medicine*, 18, 53-60.
- Nagy, S. and Davis, L.G. (1985) Burnout: a comparative analysis of personality and environmental variables. *Psychological Reports*, 57, 1319–1326.
- Nowack, K.M. and Pentkowski, A.M. (1994) Lifestyle habits, substance use and prediction of job burnout in professional working women. Work and Stress, 8, 19-35.
- Nowack, K.M., Hanson, A.L. and Gibbons, J. (1985) Factors affecting burnout and job performance of resident assistants. *Journal of College Student Personnel*, 26, 137-142.
- O'Driscoll, M.P. and Schubert, T. (1988) Organizational climate and burnout in a New Zealand social service agency. Work and Stress, 2, 199-204.
- Ogus, E.D., Greenglass, E.R. and Burke, R.J. (1990) Gender-role differences, work stress and depersonalization. *Journal of Social Behavior and Personality*, 5, 387-398.
- Papadatou, D., Anagnostopoulos, F. and Monos, D. (1994) Factors contributing to the development of burnout in oncology nursing. British Journal of Medical Psychology, 67, 187-199.
- Paine, W.S. (1982) The burnout syndrome in context. In J.W. Jones (ed.) The Burnout Syndrome. London House Press, Parke Ridge, IL, pp. 1-29.
- Perlman, B. and Hartman, A.E. (1982) Burnout: summary and future research. Human Relations, 35, 283-305.
- Pines, A. (1993) Burnout: an existential perspective. In W.B. Schaufeli, C. Maslach and T. Marek (eds) *Professional Burnout: Recent Developments in Theory and Research*. Taylor and Francis, London, pp. 33-51.
- Pines, A. and Aronson, E. (1983) Combatting burnout. Children and Youth Services Review, 5, 263–275.
- Pines, A. and Aronson, E. (1988) Career Burnout: Causes and Cures. Free Press, New York. Pines, A. and Kafry, D. (1978) Occupational tedium in the social services. Social Work, 23, 499-507.
- Pines, A. and Kafry, D. (1982) Coping with burnout. In J.W. Jones (ed.) The Burnout Syndrome. London House Press, Parke Ridge, IL, pp. 139-150.
- Pines, A. and Maslach, C. (1978) Characteristics of staff burn-out in mental health settings. Hospital and Community Psychiatry, 29, 233-237.
- Pines, A. and Maslach, C. (1980) Combatting staff burnout in a day care setting: a case study. Child Quarterly, 9, 5-16.
- Pines, A. and Aronson, E., with Kafry, D. (1981) Burnout: From Tedium to Personal Growth. Free Press, New York.
- Poulin, J. and Walter, C. (1993) Social worker burnout: a longitudinal study. Social Work Research and Abstracts, 29, 5-11.
- Quattrochi-Tubin, S., Jones, J.W. and Breedlove, V. (1982) The burnout syndrome in geriatric counselors and service workers. Activities, Adaptation and Aging, 3, 65-76.
- Radquepaw, J.M. and Miller, R.S. (1989) Psychotherapist burnout: a componential analysis. *Professional Psychology: Research and Practice*, 20, 32-36.
- Reilly, N.P. (1994) Exploring the paradox: commitment as a moderator of the stress-burnout relationship. *Journal of Applied Social Psychology*, 24, 397-414.
- Richardson, A.M., Burke, R.J. and Leiter, M.P. (1992) Occupational demands, psychological burnout and anxiety among hospital personnel in Norway. *Anxiety, Stress and Coping*, 5, 55-68.
- Ross, R.R. and Altmaier, E.M. (1994) Intervention in Occupational Stress. Sage, London.
- Rountree, B.H. (1984) Psychological burnout in task groups. Journal of Health and Human Resources Administration, 7, 235-248.
- Schachter, S. (1959) The Psychology of Affiliation. Stanford University Press, Palo Alto, CA. Schauseli, W.B. (1990) Opgebrand: Over de achtergronden van werkstress bij contactuele

- beroepen (Burnout: About Job Stress among Human Services Professions). Ad. Donker, Rotterdam.
- Schaufeli, W.B. (1995) The evaluation of a burnout-workshop for community nurses. *Journal* of Health and Human Services Administration, 18, 11-30.
- Schaufeli, W.B. and Janczur, B. (1994) Burnout among nurses: a Polish-Dutch comparison. Journal of Cross-Cultural Psychology, 25, 95-113.
- Schaufeli, W.B. and Van Dierendonck, D. (1993) The construct validity of two burnout measures. *Journal of Organizational Behaviour*, 14, 631-647.
- Schaufeli, W.B. and Van Dierendonck, D. (1994) Burnout, een concept gemeten: De Nederlandse versie van de Maslach Burnout Inventory (MBI-NL) (Burnout, the measurement of a construct: the Dutch version of the Maslach Burnout Inventory). Gedrag en Gezondheid, 22, 153-172.
- Schaufeli, W.B. and Van Dierendonck, D. (1995). A cautionary note about the cross-national and clinical validity of cut-off points for the Maslach Burnout Inventory, *Psychological Reports*, 67, 1083-1090.
- Schaufeli, W.B., Enzmann, D. and Girault, N. (1993) Measurement of burnout: a review. In W.B. Schaufeli, C. Maslach and T. Marek (eds) Professional Burnout: Recent Developments in Theory and Research. Taylor and Francis, London, pp. 199-215.
- Schaufeli, W.B., Keijsers, G.J. and Reis Miranda, D. (1995) Burnout, technology use, and ICU-performance. In S. L. Sauter and L.R. Murphy (eds) *Organizational Risk Factors for Job Stress*. RAmerican Psychological Association, Washington, DC, pp. 259–271.
- Schaufeli, W.B., Maslach, C. and Marek, T. (eds) (1993) Professional Burnout: Recent Developments in Theory and Research. Taylor and Francis, London.
- Schaufeli, W.B., Van den Eynden, R.J.J.M. and Brouwers, H.M.G. (1994) Stress en burnout bij penitentiare inrichtingswerkers: De rol van sociaal-cognitieve factoren (Stress and burnout among prison officers: the role of social cognitive factors). Gedrag en Organisatie, 7, 216-224.
- Schwartz, M.S. and Will, G.T. (1953) Low morale and mutual withdrawal on a hospital ward. *Psychiatry*, 16, 337–353.
- Shirom, A. (1989) Burnout in work organizations. In C.L. Cooper and I. Robertson (eds) International Review of Industrial and Organizational Psychology. John Wiley & Sons, New York, pp. 25-48.
- Skorupka, J. and Agresti, A.A. (1993) Ethical beliefs about burnout and continued professional practice. *Professional Psychology: Research and Practice*, 24, 1-5.
- Spicuzza, F.J. and De Voe, M.W. (1982) Burnout in the helping professions: mutual aid groups as self help. *The Personnel and Guidance Journal*, 61, 95-99.
- Stevens, G.B. and O'Neill, P. (1983) Expectation and burnout in the developmental disabilities field. American Journal of Community Psychology, 11, 615-627.
- Thornton, P.I. (1992) The relation of coping, appraisal, and burnout in mental health workers. *Journal of Psychology*, 126, 261-271.
- Van Dierendonck, D. and Schaufeli, W.B. (1993) Burnout en organisatiebetrokkenheid bij leerling-verpleegkundigen: De rol van billijkheid, sociale steun en probleemhantering (Burnout and organizational commitment among student nurses: the role of equity, social support and coping). Tijdschrift voor Sociale Gezondheidszorg, Gezondheid en Samenleving, 6, 339-344.
- Van Dierendonck, D., Schaufeli, W.B. and Sixma, H.J. (1994) Burnout among general practitioners: a perspective from equity theory. *Journal of Social and Clinical Psychology*, 13, 86-100.
- Van Gorp, K., Schaufeli, W.B. and Hopstaken, J. (1993) Burnout en terugtrekgedrag vanuit sociaal uitwisselingsperspectief (Burnout and withdrawal behaviour from a social exchange perspective). Gedrag en Gezondheid, 21, 274–285.
- Van Yperen, N.W., Buunk, A.P. and Schaufeli, W.B. (1992) Imbalance, communal orientation and the burnout syndrome among nurses. *Journal of Applied Social Psychology*, 22, 173–189.
- Veninga, R.L. and Spradley, J.P. (1981) The Work/Stress connection: How to Cope with Job

- Burnout. Little, Brown, Boston, MA.
- Wade, D.C., Cooley, E. and Savicki, V. (1986) A longitudinal study of burnout. *Children and Youth Services Review*, 8, 161-173.
- Walster, E., Walster, G.W. and Berscheid, E. (1978) Equity: Theory and research. Allyn and Bacon, Boston, MA.
- Warr, P.B. (1987) Work, Unemployment and Mental Health. Clarendon Press, Oxford.
- West, D.J., Horan, J.J. and Games, P.A. (1984) Component analysis of occupational stress inoculation applied to registered nurses in an acute care hospital setting. *Journal of Consulting Psychology*, 31, 209-218.
- Whitehead, J.T. (1989) Burnout in Probation and Corrections. Praeger, New York.
- Williams, C.A. (1989) Empathy and burnout in male and female helping professionals. Research in Nursing and Health, 12, 169-178.
- Wolpin, J. (1986) Psychological burnout among Canadian teachers: a longitudinal study. Doctoral dissertation, York University, Toronto.
- Wolpin, J., Burke, R.J. and Greenglass, E.R. (1991) Is job satisfaction antecedent or consequence of psychological burnout? *Human Relations*, 44, 193-209.