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Job Burnout

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■ **Abstract** Burnout is a prolonged response to chronic emotional and interpersonal stressors on the job, and is defined by the three dimensions of exhaustion, cynicism, and inefficacy. The past 25 years of research has established the complexity of the construct, and places the individual stress experience within a larger organizational context of people's relation to their work. Recently, the work on burnout has expanded internationally and has led to new conceptual models. The focus on engagement, the positive antithesis of burnout, promises to yield new perspectives on interventions to alleviate burnout. The social focus of burnout, the solid research basis concerning the syndrome, and its specific ties to the work domain make a distinct and valuable contribution to people's health and well-being.

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INTRODUCTION

The relationship that people have with their work, and the difficulties that can arise when that relationship goes awry, have been long recognized as a significant phenomenon of the modern age. The use of the term burnout for this phenomenon began to appear with some regularity in the 1970s in the United States, especially among people working in the human services. This popular usage was presaged by Greene’s 1961 novel, *A Burn-Out Case*, in which a spiritually tormented and disillusioned architect quits his job and withdraws into the African jungle. Even earlier writing, both fictional and nonfictional, described similar phenomena, including extreme fatigue and the loss of idealism and passion for one’s job. What is noteworthy is that the importance of burnout as a social problem was identified by both practitioners and social commentators long before it became a focus of systematic study by researchers.

The evocative power of the burnout term to capture the realities of people’s experiences in the workplace is what has made it both important and controversial in the research field. As the “language of the people,” burnout was more grounded in the complexities of people’s relationship to work and gave new attention to some aspects of it. However, burnout was also derided at first as nonscholarly “pop psychology.” Unlike other research on the workplace, which used a top-down approach derived from a scholarly theory, burnout research initially utilized a bottom-up or “grass-roots” approach derived from people’s workplace experiences. At first, the popular, nonacademic origins of burnout were more of a liability than an advantage. However, given the subsequent development of theoretical

models and numerous empirical studies, the issue of research scholarship has now been laid to rest.

What has emerged from all of this research is a conceptualization of job burnout as a psychological syndrome in response to chronic interpersonal stressors on the job. The three key dimensions of this response are an overwhelming exhaustion, feelings of cynicism and detachment from the job, and a sense of ineffectiveness and lack of accomplishment. The exhaustion component represents the basic individual stress dimension of burnout. It refers to feelings of being overextended and depleted of one's emotional and physical resources. The cynicism (or depersonalization) component represents the interpersonal context dimension of burnout. It refers to a negative, callous, or excessively detached response to various aspects of the job. The component of reduced efficacy or accomplishment represents the self-evaluation dimension of burnout. It refers to feelings of incompetence and a lack of achievement and productivity at work.

The goal of this chapter is to provide a critical analysis of what has been learned from the past 25 years of work on job burnout. We frame each of the sections in terms of key research questions that have been raised and then summarize the theoretical and empirical responses to them. A comprehensive citation of the research literature is available elsewhere (Cordes & Dougherty 1993, Schaufeli & Enzmann 1998); our focus here is on what we see as the major issues in the field.

HISTORY OF BURNOUT RESEARCH

These major issues and themes have been shaped in important ways by the history of the research on burnout. This research has gone through distinct phases of development.

The Pioneering Phase

In the first phase, the work was exploratory and had the goal of articulating the phenomenon of burnout. The initial articles appeared in the mid-1970s in the United States and their primary contribution was to describe the basic phenomenon, give it a name, and show that it was not an uncommon response. This early writing was based on the experience of people working in human services and health care—occupations in which the goal is to provide aid and service to people in need, and which can therefore be characterized by emotional and interpersonal stressors. The initial articles were written by Freudenberg (1975), a psychiatrist working in an alternative health care agency, and by Maslach (1976), a social psychologist who was studying emotions in the workplace. Freudenberg provided direct accounts of the process by which he and others experienced emotional depletion and a loss of motivation and commitment, and he labeled it with a term being used colloquially to refer to the effects of chronic drug abuse: burnout. Maslach interviewed a wide range of human services workers about the emotional stress of their jobs

and discovered that the coping strategies had important implications for people's professional identity and job behavior.

Thus, burnout research had its roots in care-giving and service occupations, in which the core of the job was the relationship between provider and recipient. This interpersonal context of the job meant that, from the beginning, burnout was studied not so much as an individual stress response, but in terms of an individual's relational transactions in the workplace. Moreover, this interpersonal context focused attention on the individual's emotions, and on the motives and values underlying his or her work with recipients.

The clinical and social psychological perspectives of the initial articles influenced the nature of the first phase of burnout research. On the clinical side, the focus was on symptoms of burnout and on issues of mental health. On the social side, the focus was on the relationship between provider and recipient and on the situational context of service occupations. Most of this initial research was descriptive and qualitative in nature, utilizing such techniques as interviews, case studies, and on-site observations.

Several themes emerged from these early interviews in the human services, suggesting that the burnout phenomenon had some identifiable regularities. First, it was clear that the provision of service or care can be a very demanding and involving occupation and that emotional exhaustion is not an uncommon response to such job overload. The second component of depersonalization (cynicism) also emerged from these interviews, as people described how they tried to cope with the emotional stresses of their work. Moderating one's compassion for clients by emotional distance from them ("detached concern") was viewed as a way of protecting oneself from intense emotional arousal that could interfere with functioning effectively on the job. However, an imbalance of excessive detachment and little concern seemed to lead staff to respond to clients in negative, callous, and dehumanized ways.

A better feel for the situational context of the provider-recipient relationship came from field observations, in addition to the interviews. It was possible to see first-hand some of the job factors that had been described in earlier interviews, such as the high number of clients (caseload), prevalence of negative client feedback, and scarcity of resources. It was also possible to observe other, unreported aspects of the interaction between provider and client, such as nonverbal "distancing" behaviors.

Interwoven throughout this early work was a central focus on relationships—usually between provider and recipient, but also between provider and coworkers or family members. These relationships were the source of both emotional strains and rewards and sometimes they functioned as a resource for coping with stress. The centrality of these interactions for the experiences that were being described made it clear that a contextual analysis of the overall phenomenon would be the most appropriate way to gain insight into it.

In addition, this first phase was characterized by a strong applied orientation, which reflected the particular set of social, economic, historical, and cultural factors

of the 1970s. These factors influenced the professionalization of the human services in the United States and had made it more difficult for people to find fulfillment and satisfaction in these careers (see Cherniss 1980, Farber 1983). The strong concern in these occupations about the problem of burnout led to calls for immediate solutions, despite the lack of much solid knowledge of burnout's causes and correlates. Burnout workshops became a primary mode of intervention, and were also used as sources of data by some researchers (e.g. Pines et al 1981).

The Empirical Phase

In the 1980s the work on burnout shifted to more systematic empirical research. This work was more quantitative in nature, utilizing questionnaire and survey methodology and studying larger subject populations. A particular focus of this research was the assessment of burnout, and several different measures were developed. The scale that has had the strongest psychometric properties and continues to be used most widely by researchers is the Maslach Burnout Inventory (MBI) developed by Maslach & Jackson (1981). The MBI was originally designed for use in human service occupations. However, in response to the interest in burnout by teachers, a second version of the MBI was soon developed for use by educational occupations. With the growing body of empirical research, alternative proposals began to be generated about the developmental course of burnout over time.

The shift to greater empiricism was accompanied by theoretical and methodological contributions from the field of industrial-organizational psychology. Burnout was viewed as a form of job stress, with links to such concepts as job satisfaction, organizational commitment, and turnover. The industrial-organizational approach, when combined with the prior work based in clinical and social psychology, generated a richer diversity of perspectives on burnout and strengthened the scholarly base via the use of standardized tools and research designs.

In the 1990s this empirical phase continued, but with several new directions. First, the concept of burnout was extended to occupations beyond the human services and education (e.g. clerical, computer technology, military, managers). Second, burnout research was enhanced by more sophisticated methodology and statistical tools. The complex relationships among organizational factors and the three components of burnout led to the use of structural models in much burnout research. This approach permits researchers to examine the contribution of many potential influences and consequences simultaneously, separating unique contributors to the development of burnout from those that are redundant. Third, a few longitudinal studies began to assess the links between the work environment at one time and the individual's thoughts and feelings at a later time. In addition to addressing the fundamental premise that burnout is a consequence of the interaction of an individual with a worksetting, longitudinal studies are important for assessing the impact of interventions to alleviate burnout.

In the following sections, we summarize the key themes and issues that have emerged from this body of work. We first consider the concept of burnout, in

terms of both theory and assessment. Next we review the findings for situational factors and individual factors. We then review three areas in which there has been a recent expansion of work on burnout: an international expansion of research, a theoretical expansion to a model of person-job fit, and an expansion of the basic construct to include the positive state of job engagement. Finally, we consider implications of all this work for intervention.

DEFINING THE CONSTRUCT: What Is Burnout?

Burnout was initially a very slippery concept—there was no standard definition of it, although there was a wide variety of opinions about what it was and what could be done about it. Different people used the term to mean very different things, so there was not always a basis for constructive communication about the problem and solutions for it. However, there was actually an underlying consensus about three core dimensions of the burnout experience, and subsequent research on this issue led to the development of a multidimensional theory of burnout (Maslach 1982, 1998). This theoretical framework continues to be the predominant one in the burnout field.

Assessment

The only measure that assesses all three of the core dimensions is the MBI (see Maslach et al 1996 for the most recent edition). The MBI-Human Services Survey (MBI-HSS) was designed for use with people working in the human services and health care. A second version was developed for use by people working in educational settings (the MBI-Educators Survey, or MBI-ES). In both the HSS and ES forms, the labels for the three dimensions reflected the focus on occupations where workers interacted extensively with other people (clients, patients, students, etc): emotional exhaustion, depersonalization, and reduced personal accomplishment.

Given the increasing interest in burnout within occupations that are not so clearly people-oriented, a third, general version of the MBI was developed (the MBI-General Survey, or MBI-GS). Here, the three components of the burnout construct are conceptualized in slightly broader terms, with respect to the job, and not just to the personal relationships that may be a part of that job. Thus, the labels for the three components are: exhaustion, cynicism (a distant attitude toward the job), and reduced professional efficacy. The MBI-GS assesses the same three dimensions as the original measure, using slightly revised items, and maintains a consistent factor structure across a variety of occupations.

Three Dimensions of Burnout

Exhaustion is the central quality of burnout and the most obvious manifestation of this complex syndrome. When people describe themselves or others as experiencing burnout, they are most often referring to the experience of exhaustion.

Of the three aspects of burnout, exhaustion is the most widely reported and the most thoroughly analyzed. The strong identification of exhaustion with burnout has led some to argue that the other two aspects of the syndrome are incidental or unnecessary (Shirom 1989). However, the fact that exhaustion is a necessary criterion for burnout does not mean it is sufficient. If one were to look at burnout out of context, and simply focus on the individual exhaustion component, one would lose sight of the phenomenon entirely.

Although exhaustion reflects the stress dimension of burnout, it fails to capture the critical aspects of the relationship people have with their work. Exhaustion is not something that is simply experienced—rather, it prompts actions to distance oneself emotionally and cognitively from one's work, presumably as a way to cope with the work overload. Within the human services, the emotional demands of the work can exhaust a service provider's capacity to be involved with, and responsive to, the needs of service recipients. Depersonalization is an attempt to put distance between oneself and service recipients by actively ignoring the qualities that make them unique and engaging people. Their demands are more manageable when they are considered impersonal objects of one's work. Outside of the human services, people use cognitive distancing by developing an indifference or cynical attitude when they are exhausted and discouraged. Distancing is such an immediate reaction to exhaustion that a strong relationship from exhaustion to cynicism (depersonalization) is found consistently in burnout research, across a wide range of organizational and occupational settings.

The relationship of inefficacy (reduced personal accomplishment) to the other two aspects of burnout is somewhat more complex. In some instances it appears to be a function, to some degree, of either exhaustion, cynicism, or a combination of the two (Byrne 1994, Lee & Ashforth 1996). A work situation with chronic, overwhelming demands that contribute to exhaustion or cynicism is likely to erode one's sense of effectiveness. Further, exhaustion or depersonalization interfere with effectiveness: It is difficult to gain a sense of accomplishment when feeling exhausted or when helping people toward whom one is indifferent. However, in other job contexts, inefficacy appears to develop in parallel with the other two burnout aspects, rather than sequentially (Leiter 1993). The lack of efficacy seems to arise more clearly from a lack of relevant resources, whereas exhaustion and cynicism emerge from the presence of work overload and social conflict.

Discriminant Validity

Some of the early discussion about burnout focused on issues of discriminant validity—that is, was burnout truly a distinctly different phenomenon from other established constructs? A variety of such constructs were considered, but the primary focus was on two: depression and job satisfaction. Speculation on these issues was often more frequent than empirical data.

Research conducted during the development of the MBI found burnout to be related to anxiety and depression. Subsequently, the distinction between burnout

and depression was established empirically in several studies using the MBI and various measures of depression (Bakker et al 2000, Glass & McKnight 1996, Leiter & Durup 1994). This research established that burnout is a problem that is specific to the work context, in contrast to depression, which tends to pervade every domain of a person's life. These findings lent empirical support to earlier claims that burnout is more job-related and situation-specific than general depression (Freudenberger 1983, Warr 1987). However, as noted later, individuals who are more depression-prone (as indicated by higher scores on neuroticism) are more vulnerable to burnout.

Further support for this distinction comes from an analysis of various conceptualizations of burnout, which notes five common elements of the burnout phenomenon (Maslach & Schaufeli 1993). (a) There is a predominance of dysphoric symptoms such as mental or emotional exhaustion, fatigue, and depression. (b) The emphasis is on mental and behavioral symptoms more than physical ones. (c) Burnout symptoms are work-related. (d) The symptoms manifest themselves in "normal" persons who did not suffer from psychopathology before. (e) Decreased effectiveness and work performance occur because of negative attitudes and behaviors. Most of these elements are represented in the diagnosis for job-related neurasthenia (WHO 1992), so recent research has been utilizing this diagnosis as the psychiatric equivalent of burnout. A new study has found that burnout scores on the MBI can distinguish psychiatric outpatients diagnosed with job-related neurasthenia from outpatients diagnosed with other mental disorders, and that the former group shows a less pathological profile than the latter (Schaufeli et al 2000).

In the case of the distinction between job satisfaction and burnout, the issue concerns the interpretation of the commonly found negative correlation between these two constructs (ranging from .40 to .52). Although the correlation is not large enough to conclude that the constructs are actually identical, they are clearly linked. However, the specific nature of that link is still a matter of speculation. Does burnout cause people to be dissatisfied with their job? Or does a drop in satisfaction serve as the precursor to burnout? Alternatively, both burnout and job dissatisfaction may be caused by another factor, such as poor working conditions.

Developmental Models

There has been a great deal of theorizing about the developmental trajectory of burnout over time. However, there has been scant research to actually test any of these hypotheses, primarily because of the inherent difficulties of doing the requisite longitudinal research. Most of the relevant data have come from either cross-sectional studies or studies utilizing statistical causal models. The few studies that have used repeated measures have usually used a timeframe ranging from a few months to one year; the one notable exception is the set of case study interviews

done as a 12-year follow-up by Cherniss (1995). The most recent longitudinal research has developed more sophisticated analyses for identifying how changes in work stressors can predict changes in burnout (Peiro et al 2001).

Several folk theories about the development of burnout emerged from the interviews of the earliest pioneering phase of research. One theory is that it is the best and most idealistic workers who experience burnout—as captured in the common phrase, “You have to have been on fire in order to burn out.” The notion here is that such dedicated people end up doing too much in support of their ideals, thus leading to exhaustion and eventual cynicism when their sacrifice has not been sufficient to achieve their goals. A second theory is that burnout is the end result of long exposure to chronic job stressors. Consequently, burnout ought to occur later in people’s careers, rather than earlier, and it should be relatively stable over time if people stay in the same job. There has also been debate about whether burnout results from overload (i.e. too many demands with too few resources) or from underload (i.e. tedium and monotony).

Once the three dimensions of the burnout syndrome had been identified, several developmental models were presented in these dimensional terms. The phase model proposed that each of the three dimensions be split into high and low scores, so that all possible combinations of the three dimensions resulted in eight patterns, or phases, of burnout (Golembiewski & Munzenrider 1988). In terms of development, one alternative was that depersonalization (cynicism) is the first phase of burnout, followed by inefficacy, and finally exhaustion. Another alternative was that the different dimensions developed simultaneously but independently, and thus could result in the eight different patterns. Research based on the phase model has established that the progression of phases from low to high burnout is correlated with worsening indices of both work and personal well-being.

Another model of the three dimensions hypothesized a different sequential progression over time, in which the occurrence of one dimension precipitates the development of another. According to this model, exhaustion occurs first, leading to the development of cynicism, which leads subsequently to inefficacy. For example, a study of hospital nurses yielded the following sequence: (a) Stressful interactions with supervisors increase the workers’ feelings of exhaustion; (b) high levels of exhaustion lead to cynicism, especially if workers lack supportive contact with their coworkers; (c) as cynicism persists, the workers’ feelings of efficacy diminish, although supportive contact with coworkers may help to decelerate this process (Leiter & Maslach 1988).

In general, the research on burnout has established the sequential link from exhaustion to cynicism. However, as mentioned earlier, the subsequent link to inefficacy is less clear, with the current data supporting a simultaneous development of this third dimension rather than a sequential one. It is also the case that burnout scores are fairly stable over time, which supports the notion that burnout is a prolonged response to chronic job stressors.

Outcomes

The significance of burnout, both for the individual and the workplace, lies in its links to important outcomes. Most of the outcomes that have been studied have been ones related to job performance. There has also been some attention paid to health outcomes, given that burnout is considered a stress phenomenon. However, the research findings have to be interpreted with some caution because of the reliance on self-report measures (rather than other indices of performance or health) and the relative absence of methodological designs that permit causal inferences.

Job Performance Burnout has been associated with various forms of job withdrawal—absenteeism, intention to leave the job, and actual turnover. However, for people who stay on the job, burnout leads to lower productivity and effectiveness at work. Consequently, it is associated with decreased job satisfaction and a reduced commitment to the job or the organization.

People who are experiencing burnout can have a negative impact on their colleagues, both by causing greater personal conflict and by disrupting job tasks. Thus, burnout can be “contagious” and perpetuate itself through informal interactions on the job. There is also some evidence that burnout has a negative “spillover” effect on people’s home life (Burke & Greenglass 2001).

Health The exhaustion component of burnout is more predictive of stress-related health outcomes than the other two components. These physiological correlates mirror those found with other indices of prolonged stress. Parallel findings have been found for the link between burnout and various forms of substance abuse.

In terms of mental health, the link with burnout is more complex. As mentioned earlier, burnout has been linked to the personality dimension of neuroticism and the psychiatric profile of job-related neurasthenia. Such data might support the argument that burnout is itself a form of mental illness. However, a more common assumption has been that burnout causes mental dysfunction—that is, it precipitates negative effects in terms of mental health, such as anxiety, depression, drops in self-esteem, and so forth. An alternative argument is that people who are mentally healthy are better able to cope with chronic stressors and thus less likely to experience burnout. Although not assessing burnout directly, one study addressed this question by analyzing archival longitudinal data of people who worked in interpersonally demanding jobs (i.e. emotionally demanding “helper” roles, or jobs that deal with people in stressful situations). The results showed that people who were psychologically healthier in adolescence and early adulthood were more likely to enter, and remain in, such jobs, and they showed greater involvement and satisfaction with their work (Jenkins & Maslach 1994). Given this longitudinal data set, this study was better able to establish possible causal relationships than typical correlational studies can.

SITUATIONAL FACTORS: Where Does Burnout Occur?

Burnout is an individual experience that is specific to the work context. Thus, the research over the past 25 years has maintained a consistent focus on the situational factors that are the prime correlates of this phenomenon. The results of this research paint a clear picture of the impact of the work situation on individual burnout.

Job Characteristics

Quantitative job demands (e.g. too much work for the available time) have been studied by many burnout researchers, and the findings support the general notion that burnout is a response to overload. Experienced workload and time pressure are strongly and consistently related to burnout, particularly the exhaustion dimension. This pattern is found with both self-reports of experienced strain and more objective measures of demands (such as number of hours worked and number of clients).

Studies of qualitative job demands have focused primarily on role conflict and role ambiguity, both of which consistently show a moderate to high correlation with burnout. Role conflict occurs when conflicting demands at the job have to be met, whereas role ambiguity occurs when there is a lack of adequate information to do the job well. Other qualitative job demands (such as the severity of clients' problems) have only been studied occasionally, but the correlations are in the same direction.

In addition to studying the presence of job demands, burnout researchers have investigated the absence of job resources. The resource that has been studied most extensively has been social support, and there is now a consistent and strong body of evidence that a lack of social support is linked to burnout. Lack of support from supervisors is especially important, even more so than support from coworkers. Within the social support literature, there is also a "buffering" hypothesis that suggests that social support should moderate the relationship between job stressors and burnout (i.e. the relationship will be strong when social support is low, but weak when support is high). However, studies of this hypothesis have met with mixed success, and it is not clear whether this outcome is due to methodological or theoretical issues.

Another set of job resources has to do with information and control. A lack of feedback is consistently related to all three dimensions of burnout. Burnout is also higher for people who have little participation in decision making. Similarly, a lack of autonomy is correlated with burnout, although the strength of the relationship is weaker.

Occupational Characteristics

The initial work on burnout developed out of the occupational sector of human services and education (which continues to be the primary focus of burnout studies). Of particular concern in these occupations were the emotional challenges of

Organizational Characteristics

The increasing breadth of occupational sectors has required a rethinking of the situational context for burnout. Prior research has tended to focus on the immediate context in which work occurs, whether that be a nurse's work with patients in a hospital or a teacher's work with students in a school. However, this work often takes place within a larger organization that includes hierarchies, operating rules, resources, and space distribution. All of these factors can have a far-reaching and persistent influence, particularly when they violate basic expectations of fairness and equity. Consequently, the contextual focus has been broadened to include the organizational and management environment in which work occurs. This focus has highlighted the importance of the values implicit in organizational processes and structures, and how these values shape the emotional and cognitive relationship that people develop with their work. This research has important implications for burnout, but because it is still fairly new, a summary of major patterns in the data is not yet warranted.

The organizational context is also shaped by larger social, cultural, and economic forces. Recently, this has meant that organizations have undergone a lot of changes, such as downsizing and mergers, that have had significant effects on the lives of their employees. This is perhaps most evident in changes in the psychological contract—i.e. the belief in what the employer is obliged to provide based on perceived promises of reciprocal exchange (Rousseau 1995). Now employees are expected to give more in terms of time, effort, skills, and flexibility, whereas they receive less in terms of career opportunities, lifetime employment, job security, and so on. Violation of the psychological contract is likely to produce burnout because it erodes the notion of reciprocity, which is crucial in maintaining well-being.

INDIVIDUAL FACTORS: Who Experiences Burnout?

People do not simply respond to the work setting; rather, they bring unique qualities to the relationship. These personal factors include demographic variables (such as age or formal education), enduring personality characteristics, and work-related attitudes. Several of these individual characteristics have been found to be related to burnout. However, these relationships are not as great in size as those for burnout and situational factors, which suggests that burnout is more of a social phenomenon than an individual one.

Demographic Characteristics

Of all the demographic variables that have been studied, age is the one that has been most consistently related to burnout. Among younger employees the level of burnout is reported to be higher than it is among those over 30 or 40 years old. Age is confounded with work experience, so burnout appears to be more of a risk earlier in one's career. The reasons for such an interpretation have not been studied

very thoroughly. However, these findings should be viewed with caution because of the problem of survival bias—i.e. those who burn out early in their careers are likely to quit their jobs, leaving behind the survivors who consequently exhibit lower levels of burnout.

The demographic variable of sex has not been a strong predictor of burnout (despite some arguments that burnout is more of a female experience). Some studies show higher burnout for women, some show higher scores for men, and others find no overall differences. The one small but consistent sex difference is that males often score higher on cynicism. There is also a tendency in some studies for women to score slightly higher on exhaustion. These results could be related to gender role stereotypes, but they may also reflect the confounding of sex with occupation (e.g. police officers are more likely to be male, nurses are more likely to be female).

With regard to marital status, those who are unmarried (especially men) seem to be more prone to burnout compared with those who are married. Singles seem to experience even higher burnout levels than those who are divorced. As for ethnicity, very few studies have assessed this demographic variable, so it is not possible to summarize any empirical trends.

Some studies have found that those with a higher level of education report higher levels of burnout than less educated employees. It is not clear how to interpret this finding, given that education is confounded with other variables, such as occupation and status. It is possible that people with higher education have jobs with greater responsibilities and higher stress. Or it may be that more highly educated people have higher expectations for their jobs, and are thus more distressed if these expectations are not realized.

Personality Characteristics

Several personality traits have been studied in an attempt to discover which types of people may be at greater risk for experiencing burnout. People who display low levels of hardiness (involvement in daily activities, a sense of control over events, and openness to change) have higher burnout scores, particularly on the exhaustion dimension. Burnout is higher among people who have an external locus of control (attributing events and achievements to powerful others or to chance) rather than an internal locus of control (attributions to one's own ability and effort). Similar results have been reported on coping styles and burnout. Those who are burned-out cope with stressful events in a rather passive, defensive way, whereas active and confrontive coping is associated with less burnout. In particular, confrontive coping is associated with the dimension of efficacy. In other research, all three burnout dimensions have been related to lower self-esteem.

It has been argued that low levels of hardiness, poor self-esteem, an external locus of control, and an avoidant coping style typically constitute the profile of a stress-prone individual (Semmer 1996). Obviously, the results from the burnout research confirm this personality profile.

Research on the Big Five personality dimensions has found that burnout is linked to the dimension of neuroticism. Neuroticism includes trait anxiety, hostility, depression, self-consciousness, and vulnerability; neurotic individuals are emotionally unstable and prone to psychological distress. The exhaustion dimension of burnout also appears to be linked to Type-A behavior (competition, time-pressured lifestyle, hostility, and an excessive need for control). There are also indications that individuals who are “feeling types” rather than “thinking types” (in terms of a Jungian analysis) are more prone to burnout, especially to cynicism.

Job Attitudes

People vary in the expectations they bring to their job. In some cases these expectations are very high, both in terms of the nature of the work (e.g. exciting, challenging, fun) and the likelihood of achieving success (e.g. curing patients, getting promoted). Whether such high expectations are considered to be idealistic or unrealistic, one hypothesis has been that they are a risk factor for burnout. Presumably, high expectations lead people to work too hard and do too much, thus leading to exhaustion and eventual cynicism when the high effort does not yield the expected results. This hypothesis has received mixed empirical support—about half of the studies find the hypothesized correlation, whereas the rest do not. Once again, however, this is an instance where a correlation does not actually test the causal relationship inherent in the hypothesis. Longitudinal studies with repeated measures will be necessary to shed light on this issue.

EXPANDING THE RESEARCH: International Studies

One of the key domains in which burnout research has expanded is in extending beyond its original American borders. At first, the phenomenon drew attention in English-speaking countries, such as Canada and Great Britain. Soon articles, books, and research measures were translated into numerous languages, and subsequently research on burnout emerged in many European countries, as well as Israel.

Because burnout research in these countries started after the concept and measures had been established in the United States, that work built on an already established theoretical and methodological base. Hence, the initial conceptual debate on burnout was less broad, and alternative measures were rarely developed. Given that the MBI had become the instrument of choice to measure burnout in North America, the concept of burnout as operationalized in terms of the MBI was exported to other countries. However, by the 1990s, the intellectual contributions of non-Anglo-Saxon authors in terms of theory, research, and intervention were considerable.

To date, burnout has been studied in many countries around the globe. Interestingly, the term burnout is left untranslated in almost all countries, although literal

translations in many cases do exist: *ausgebrannt* (German), *opgebrand* (Dutch), *utbränd* (Swedish), and *utbrant* (Norwegian), just to name a few.

In most countries, the MBI has simply been translated and its psychometric properties taken for granted. However, some versions, most notably the French (Dion & Tessier 1994), German (Büssing & Perrar 1992), and Dutch (Schaufeli & van Dierendonck 2000) have been extensively studied psychometrically. Generally speaking, foreign language versions of the MBI have similar internal consistencies and show similar factorial and construct validity as the original American version. Moreover, the three-factor structure of the MBI appears to be invariant across different countries.

Despite these similarities in psychometric properties of the MBI measure, there are national differences in the average levels of burnout. For instance, several studies of various European workers have found lower average levels of exhaustion and cynicism, compared with similar North American samples. It is not clear what the explanation might be for these differences, but it might involve different cultural values. Perhaps Europeans are less likely than Americans to respond extremely to self-report questionnaires. Public expression of some aspects of burnout—notably cynicism—may be more socially acceptable in the strongly individualized North American society than it is in Europe, where sentiments of group solidarity play a more significant role. Or it may be that the greater achievement orientation of North American society would cause people to feel more stress about their jobs. An alternative explanation might be that jobs are actually more stressful in North America than in Western Europe. Interestingly, the only European country where burnout levels have been reported to be as high as in North America is Poland, where working conditions are relatively poor compared to Western European standards. It is unlikely that the translation of the MBI can be held responsible for the differences in levels of burnout between North America and Europe, because lower burnout scores were found among nurses in English-speaking European countries (Britain and Ireland) and higher scores were found among nurses in French-Canada (see Schaufeli & Janczur 1994).

Considerable differences within and between countries have also been found in research using the scoring methodology of the phase model of burnout (Golembiewski et al 1996). In 62 samples including over 25,000 North American employees, over 20% of them were judged to be in the most advanced burnout phase. However, the incidence across these samples varied greatly from 1% to 25%. In comparison, data were also collected within 12 countries that were almost exclusively Asian or East European (21 samples of almost 7000 employees). The results indicated that slightly more of these non-Americans were classified in the most advanced burnout phase (28%; range 12%–69%). The highest incidences were found in Japan and Taiwan (between 48% and 69%). Hence, it appears that the lower average burnout scores for Western Europe are not typical for countries in other parts of the world. However, given the variation in sample selection (i.e. the samples were not random and representative), it would be premature to propose

strong conclusions about national differences and the possible underlying reasons for them.

EXPANDING THE THEORETICAL FRAMEWORK:

The Person Within Context

Recent work on burnout has begun to develop new theoretical frameworks that more explicitly integrate both individual and situational factors, rather than considering them in separate either-or terms. This call for such an integration is certainly not new. Indeed, there is a long history within psychology of trying to explain behavior in terms of the interaction of person and environment. Many of these interactional models view person and environment as independent entities, but characterize them along commensurate dimensions so that the degree of fit, or congruence, between person and environment can be assessed. This approach is evident in some of the earliest models of job-person fit (e.g. French et al 1974), in which better fit was assumed to predict better adjustment and less stress.

Thus, a model of job-person fit would seem to be an appropriate framework for understanding burnout. However, prior conceptualizations of job-person fit are limited in terms of their direct application to this phenomenon. For example, the person is usually framed in terms of personality or an accurate understanding of the job, rather than in terms of emotions, motivations, or stress responses. Similarly, the job is often defined in terms of specific tasks, and not the larger situation or organizational context. The notion of fit is often presumed to predict such outcomes as choice of job/occupation or of organization (entry issues), or adjustment to the job (newcomer issues). In contrast, burnout involves a later point in the process, when the person has been working for a while and is experiencing a more chronic misfit between self and the job. Thus, the challenge is to extend the job-person paradigm to a broader and more complex conceptualization of the person situated in the job context.

Maslach & Leiter (1997) have begun to address this challenge by formulating a model that focuses on the degree of match, or mismatch, between the person and six domains of his or her job environment. The greater the gap, or mismatch, between the person and the job, the greater the likelihood of burnout; conversely, the greater the match (or fit), the greater the likelihood of engagement with work. One new aspect of this approach is that the mismatch focus is on the enduring working relationship people have with their job. This relationship is similar to the notion of a psychological contract (Rousseau 1995). Mismatches arise when the process of establishing a psychological contract leaves critical issues unresolved, or when the working relationship changes to something that a worker finds unacceptable. Secondly, whereas prior models of job-person fit predict that such fit produces certain outcomes (such as commitment, satisfaction, performance, and job tenure), this new model hypothesizes that burnout is an important mediator of this causal

link. In other words, the mismatches lead to burnout, which in turn leads to various outcomes.

This model has brought order to the wide variety of situational correlates by proposing six areas of worklife that encompass the central relationships with burnout: workload, control, reward, community, fairness, and values. Burnout arises from chronic mismatches between people and their work setting in terms of some or all of these six areas. This is a comprehensive model that includes the full range of organizational factors found in research related to burnout. Despite their close interrelationships, each area brings a distinct perspective to the interactions of people with their work settings. These six areas of worklife come together in a framework that encompasses the major organizational antecedents of burnout.

Workload

A mismatch in workload is generally found as excessive overload, through the simple formula that too many demands exhaust an individual's energy to the extent that recovery becomes impossible. A workload mismatch may also result from the wrong kind of work, as when people lack the skills or inclination for a certain type of work, even when it is required in reasonable quantities. Emotional work is especially draining when the job requires people to display emotions inconsistent with their feelings. Generally, workload is most directly related to the exhaustion aspect of burnout.

Control

A mismatch in control is generally related to the inefficacy or reduced personal accomplishment aspect of burnout. Mismatches in control most often indicate that individuals have insufficient control over the resources needed to do their work or have insufficient authority to pursue the work in what they believe is the most effective manner. Individuals who are overwhelmed by their level of responsibility may experience a crisis in control as well as in workload. This mismatch is reflected as one of responsibility exceeding one's authority. It is distressing for people to feel responsible for producing results to which they are deeply committed while lacking the capacity to deliver on that mandate.

Reward

A third type of mismatch involves a lack of appropriate rewards for the work people do. Sometimes these may be insufficient financial rewards, as when people are not receiving the salary or benefits commensurate with their achievements. Even more important at times is the lack of social rewards, as when one's hard work is ignored and not appreciated by others. This lack of recognition devalues both the work and the workers. In addition, the lack of intrinsic rewards (such as pride in doing something of importance and doing it well) can also be a critical part of this mismatch. Lack of reward is closely associated with feelings of inefficacy.

Community

The fourth mismatch occurs when people lose a sense of positive connection with others in the workplace. People thrive in community and function best when they share praise, comfort, happiness, and humor with people they like and respect. In addition to emotional exchange and instrumental assistance, this kind of social support reaffirms a person's membership in a group with a shared sense of values. Unfortunately, some jobs isolate people from each other, or make social contact impersonal. However, what is most destructive of community is chronic and unresolved conflict with others on the job. Such conflict produces constant negative feelings of frustration and hostility, and reduces the likelihood of social support.

Fairness

A serious mismatch between the person and the job occurs when there is not perceived fairness in the workplace. Fairness communicates respect and confirms people's self-worth. Mutual respect between people is central to a shared sense of community. Unfairness can occur when there is inequity of workload or pay, when there is cheating, or when evaluations and promotions are handled inappropriately. If procedures for grievance or dispute resolution do not allow for both parties to have a voice, then those will be judged as unfair. A lack of fairness exacerbates burnout in at least two ways. First, the experience of unfair treatment is emotionally upsetting and exhausting. Second, unfairness fuels a deep sense of cynicism about the workplace.

Values

The sixth area of mismatch occurs when there is a conflict between values. In some cases, people might feel constrained by the job to do things that are unethical and not in accord with their own values. For example, in order to make a sale or to obtain a necessary authorization, they might have to tell a lie or be otherwise deceptive or not forthcoming with the truth. In other instances, there may be a mismatch between their personal aspirations for their career and the values of the organization. People can also be caught between conflicting values of the organization, as when there is a discrepancy between the lofty mission statement and actual practice, or when the values are in conflict (e.g. high quality service and cost containment do not always co-exist).

Interaction of the Six Areas

Research on this model is beginning to elucidate the relationship between these six areas, as well as their relation to the three dimensions of burnout. Preliminary evidence suggests that the area of values may play a central mediating role for the other areas. Another possibility is that the weighting of the importance of the six areas may reflect an important individual difference. For example, some people might place a higher weight on rewards than on values, and thus might be more

distressed by insufficient rewards than by value conflicts. It is not clear how much of a mismatch people are willing to tolerate, and this may depend on both the particular area of mismatch and the pattern of the other five areas. For example, people may be willing to tolerate a mismatch in workload if they receive praise and good pay, work well with their colleagues, feel their work is valuable and important, and so on.

Thus, the mismatches in these six critical areas of organizational life are not simply a list summarizing research findings from burnout studies. Rather, they provide a conceptual framework for the crises that disrupt the relationships people develop with their work. This approach emphasizes the importance of looking at the person in context, in terms of his or her fit with the key domains of worklife.

EXPANDING THE CONSTRUCT: Job Engagement

Traditionally, the focus of psychology has been on negative states rather than on positive ones. In fact, the number of articles examining negative states outnumbers the positive states by a ratio of 17 to 1 (Diener et al 1999). However, more attention is now being paid to the study of human strengths and optimal functioning. This "positive psychology" is seen as an alternative to the predominant focus on pathology and deficits. Viewed from this perspective, it is not surprising that the concept of burnout (which represents a negative psychological state) is being supplemented and enlarged by its positive antithesis of job engagement. Our current work on this concept has taken two different, but related, paths.

Maslach & Leiter (1997) rephrased burnout as an erosion of engagement with the job. What started out as important, meaningful, and challenging work becomes unpleasant, unfulfilling, and meaningless. Energy turns into exhaustion, involvement turns into cynicism, and efficacy turns into ineffectiveness. Accordingly, engagement is characterized by energy, involvement, and efficacy—the direct opposites of the three burnout dimensions. By implication, engagement is assessed by the opposite pattern of scores on the three MBI dimensions.

According to this analysis, engagement is distinct from established constructs in organizational psychology, such as organizational commitment, job satisfaction, or job involvement. Organizational commitment refers to an employee's allegiance to the organization that provides employment. The focus is on the organization, whereas engagement focuses on the work itself. Job satisfaction is the extent to which work is a source of need fulfillment and contentment, or a means of freeing employees from hassles or dissatisfiers; it does not encompass the person's relationship with the work itself. Job involvement is similar to the involvement aspect of engagement with work, but does not include the energy and effectiveness dimensions. Thus, engagement provides a more complex and thorough perspective on an individual's relationship with work.

If engagement is indeed the opposite of burnout, then a profile of engagement scores on the MBI should be associated with a profile of better matches in the

six areas of job-person fit. Such a "matched" profile would include a sustainable workload, feelings of choice and control, appropriate recognition and reward, a supportive work community, fairness and justice, and meaningful and valued work. Some empirical support for this conceptualization of engagement is provided by case studies of two hospital units (Maslach & Leiter 1997). The employees in one unit displayed a typical burnout profile (i.e. high scores on exhaustion and cynicism and low scores on efficacy), whereas employees in the other unit had an opposite profile of engagement (i.e. low scores on exhaustion and cynicism and high scores on efficacy). Indeed, and as expected, the former unit showed unfavorable scores on most of the six areas—particularly on reward and values—whereas the latter unit showed predominantly favorable scores—particularly on workload, control, fairness, and values. Thus, it seems that burnout and engagement—operationalized as favorable and unfavorable scores on the MBI, respectively—are inversely related to the six domains of worklife outlined in the previous model.

Schaufeli has taken a different approach to the concept of engagement. Here, engagement is defined and operationalized in its own right. Even though engagement is still conceptualized as the positive antithesis of burnout, there is not the presumption that it is assessed by the opposite profile of MBI scores. Furthermore, burnout and engagement may be considered two prototypes of employee well-being that are part of a more comprehensive taxonomy constituted by the two independent dimensions of pleasure and activation (Watson & Tellegen 1985). According to this framework, burnout is characterized by low levels of activation and pleasure, whereas engagement is characterized by high levels of activation and pleasure.

Based on this theoretical reasoning and on interviews with engaged employees, Schaufeli and his colleagues have defined engagement as a persistent, positive affective-motivational state of fulfillment in employees that is characterized by vigor, dedication, and absorption. Vigor refers to high levels of energy and resilience, the willingness to invest effort in one's job, the ability to not be easily fatigued, and persistence in the face of difficulties. Dedication refers to a strong involvement in one's work, accompanied by feelings of enthusiasm and significance, and by a sense of pride and inspiration. Finally, absorption refers to a pleasant state of total immersion in one's work, which is characterized by time passing quickly and being unable to detach oneself from the job. A self-report questionnaire has been developed to assess engagement that includes items such as: "I feel strong and vigorous in my job" (vigor); "I'm enthusiastic about my job" (dedication); "I feel happy when I'm engrossed in my work" (absorption). Preliminary, unpublished results based on Spanish and Dutch samples show that the three engagement scales have sufficient internal consistencies; they are moderately to strongly related; the fit of the hypothesized three-factor model to the data is superior to a one-factor solution; and all correlations with the MBI burnout scales are negative, with the correlations between engagement and efficacy being the strongest. It is interesting to note that burnout is particularly related to job demands (e.g. work overload, emotional demands), but engagement is particularly related to job resources (e.g. job control, availability of feedback, learning opportunities).

In sum, it seems that broadening the scope by including engagement as the positive antithesis of burnout, either by using the full range of the MBI scores instead of concentrating only on the negative pole, or by using an alternative engagement questionnaire, is a promising avenue that contributes to our understanding of employees' well-being.

IMPLICATIONS FOR INTERVENTION: How Do We Deal with Burnout?

The applied nature of burnout research has prompted calls for effective intervention throughout the research literature. This perspective has encouraged considerable effort, but relatively little systematic research. Various intervention strategies have been proposed—some try to treat burnout after it has occurred, whereas others focus on how to prevent burnout.

Interestingly, most discussions of burnout interventions focus primarily on individual-centered solutions, such as removing the worker from the job, or individual strategies for the worker, in which one either strengthens one's internal resources or changes one's work behaviors. This is particularly paradoxical given that research has found that situational and organizational factors play a bigger role in burnout than individual ones. Individual-oriented approaches (e.g. developing effective coping skills or learning deep relaxation) may help individuals to alleviate exhaustion, but they do not really deal with the other two components of burnout. Also, individual strategies are relatively ineffective in the workplace, where a person has much less control over stressors than in other domains of his or her life. There are both philosophical and pragmatic reasons underlying the predominant focus on the individual, including notions of individual causality and responsibility, and the assumption that it is easier and cheaper to change people than organizations (Maslach & Goldberg 1998).

Changing the Individual

The primary focus of studies of burnout reduction has been educational interventions to enhance the capacity of individuals to cope with the workplace. The goal of these studies is to alleviate burnout (as measured by reductions in MBI scores). Intervention groups generally comprise a relatively small number of participants—usually less than 100. Often, the training has focused on the participants' capacity to cope with challenges as individuals, but some have addressed team-based coping strategies. At the root of this approach are three questions: Can people learn coping skills? Can they apply this learning at work? Do new ways of coping affect burnout?

With respect to the first question, both the stress literature and a burgeoning self-help literature in the popular press have demonstrated that people can indeed learn new ways of coping. The similar conclusion to be drawn from the burnout

research is that educational sessions can enhance the capacity of human service professionals to cope with the demands of their jobs.

However, the second question does not receive such a positive answer. Applying new knowledge at work can be a challenge because people are operating under various constraints. Their roles at work require that they behave in specified ways, and organizational procedures stipulate the time and place in which much work occurs. Coworkers are designated according to their job functions, not their personal compatibility. Thus, if there is going to be significant change in the way work is done, it will require a degree of autonomy and an understanding of the organizational consequences of such change.

Assuming that it is indeed possible for people to apply new coping skills at work, does this lead to reductions in burnout? The research findings are mixed. A wide variety of intervention strategies have been tried, including stress inoculation training, relaxation, time management, assertiveness training, rational emotive therapy, training in interpersonal and social skills, teambuilding, management of professional demands, and meditation. In some cases, a reduction in exhaustion has been reported, but in other cases it has not. Rarely do any programs report a change in cynicism or inefficacy. Limitations in study design, especially difficulties in access to appropriate control groups and a lack of longitudinal assessment, have constrained the interpretation of the existing research.

Changing the Organization

In line with the findings from the research literature, a focus on the job environment, as well as the person in it, is essential for interventions to deal with burnout. This suggests that the most effective mode of intervention is to combine changes in managerial practice with the educational interventions described above. Managerial interventions are necessary to change any of the six areas of worklife but are insufficient unless educational interventions convey the requisite individual skills and attitudes. Neither changing the setting nor changing the individuals is enough; effective change occurs when both develop in an integrated fashion.

The recognition of six areas of worklife expands the range of options for organizational intervention. For example, rather than concentrating on the area of work overload for an intervention (such as teaching people how to cope with overload, how to cut back on work, or how to relax), a focus on some of the other mismatches may be more effective. People may be able to tolerate greater workload if they value the work and feel they are doing something important, or if they feel well-rewarded for their efforts, and so an intervention could target these areas of value and reward.

Initial work in this area is encouraging but incomplete. One promising approach focused on the area of fairness and equity. Employees participated in weekly group sessions designed to identify ways of reducing the perceived inequities in their job situation. In comparison with control groups, participants reported a significant decrease in emotional exhaustion at six months and one year after the

intervention. These changes were accompanied by increases in perceived equity. Again, however, the other two aspects of burnout did not change relative to baseline levels (van Dierendonck et al 1998).

One advantage of a combined managerial and educational approach to intervention is that it tends to emphasize building engagement with work. The focus on engagement permits a closer alliance with the organizational mission, especially those aspects that pertain to the quality of worklife in the organization. A worksetting that is designed to support the positive development of energy, vigor, involvement, dedication, absorption, and effectiveness among its employees should be successful in promoting their well-being and productivity. Moreover, the statement of a positive goal for intervention—building engagement (rather than reducing burnout)—enhances the accountability of the intervention. Assessing the presence of something is more definite than assessing the absence of its opposite.

Although the potential value of organizational interventions is great, they are not easy to implement. They are often complex in the level of collaboration that is necessary and they require a considerable investment of time, effort, and money. A new approach to such interventions has been designed on the basis of past research and consultation on burnout, and may provide better guidance to organizations for dealing with these issues (Leiter & Maslach 2000).

CONCLUSION

Our goal in this chapter has been to look at both the past and the future of burnout research. With regard to the past, we have tried to provide an overview of how the field has grown and developed over the past 25 years. It is a field that was born out of a social problem, and that has grown towards a more coherent set of theoretical models and empirical studies. It has yet, however, to achieve solutions to the original problem itself, and it is here that the future of burnout research may be most promising. The expanded directions that we outlined in the latter part of the chapter have the potential to make a major breakthrough in our understanding of what burnout is, what causes it, and what we can do about it.

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LITERATURE CITED

- Bakker AB, Schaufeli WB, Demerouti E, Janssen PMP, Van der Hulst R, Brouwer J. 2000. Using equity theory to examine the difference between burnout and depression. *Anxiety Stress Coping* 13:247–68
- Burke RJ, Greenglass ER. 2001. Hospital restructuring, work-family conflict and psychological burnout among nursing staff. *Psychol. Health*. In press
- Büssing A, Perrar KM. 1992. Die Messung von Burnout. Untersuchung einer deutschen Fassung des Maslach Burnout Inventory

- (MBI-D) (The measurement of burnout: investigation on the German version of the MBI). *Diagnostica* 38:328-53
- Byrne BM. 1994. Burnout: testing for the validity, replication, and invariance of causal structure across elementary, intermediate, and secondary teachers. *Am. Educ. Res. J.* 31:645-73
- Cherniss C. 1980. *Professional Burnout in Human Service Organizations*. New York: Praeger
- Cherniss C. 1995. *Beyond Burnout*. New York: Routledge
- Cordes CL, Dougherty TW. 1993. A review and an integration of research on job burnout. *Acad. Manage. Rev.* 18:621-56
- Diener E, Suh EM, Lucas RE, Smith HI. 1999. Subjective well-being: three decades of progress. *Psychol. Bull.* 125:267-302
- Dion G, Tessier R. 1994. Validation de la traduction de l'Inventaire d'épuisement professionnel de Maslach et Jackson (Validation and translation of the burnout inventory of Maslach and Jackson). *Can. J. Behav. Sci.* 26:210-27
- Farber BA, ed. 1983. *Stress and Burnout in the Human Services*. New York: Pergamon
- Farber BA. 1983. A critical perspective on burnout. See Farber 1983, pp. 1-20
- French JRP Jr, Rodgers W, Cobb S. 1974. Adjustment as person-environment fit. In *Coping and Adaptation*, ed. GV Coelho, DA Hamburg, JE Adams, pp. 316-33. New York: Basic Books
- Freudenberger HJ. 1975. The staff burnout syndrome in alternative institutions. *Psychother. Theory Res. Pract.* 12:72-83
- Freudenberger HJ. 1983. Burnout: contemporary issues, trends, and concerns. See Farber 1983, pp. 23-28
- Glass DC, McKnight JD. 1996. Perceived control, depressive symptomatology, and professional burnout: a review of the evidence. *Psychol. Health* 11:23-48
- Golembiewski RT, Boudreau RA, Munzenrider RF, Luo H. 1996. *Global Burnout: A Worldwide Pandemic Explored by the Phase Model*. Greenwich, CT: JAI Press
- Golembiewski RT, Munzenrider R. 1988. *Phases of Burnout: Developments in Concepts and Applications*. New York: Praeger
- Greene G. 1961. *A Burnt-out Case*. New York: Viking Press
- Jenkins SR, Maslach C. 1994. Psychological health and involvement in interpersonally demanding occupations: a longitudinal perspective. *J. Organ. Behav.* 15:101-27
- Lee RT, Ashforth BE. 1996. A meta-analytic examination of the correlates of the three dimensions of job burnout. *J. Appl. Psychol.* 81:123-33
- Leiter MP. 1993. Burnout as a developmental process: Consideration of models. See Schaufeli et al 1993, pp. 237-50
- Leiter MP, Durup J. 1994. The discriminant validity of burnout and depression: a confirmatory factor analytic study. *Anxiety Stress Coping* 7:357-73
- Leiter MP, Maslach C. 1988. The impact of interpersonal environment on burnout and organizational commitment. *J. Organ. Behav.* 9:297-308
- Leiter MP, Maslach C. 2000. *Preventing Burnout and Building Engagement: A Complete Program for Organizational Renewal*. San Francisco: Jossey-Bass
- Maslach C. 1976. Burned-out. *Hum. Behav.* 5:16-22
- Maslach C. 1982. *Burnout: The Cost of Caring*. Englewood Cliffs, NJ: Prentice-Hall
- Maslach C. 1998. A multidimensional theory of burnout. In *Theories of Organizational Stress*, ed. CL Cooper, pp. 68-85. Oxford, UK: Oxford Univ. Press
- Maslach C, Goldberg J. 1998. Prevention of burnout: new perspectives. *Appl. Prev. Psychol.* 7:63-74
- Maslach C, Jackson SE. 1981. The measurement of experienced burnout. *J. Occup. Behav.* 2:99-113
- Maslach C, Jackson SE, Leiter MP. 1996. *Maslach Burnout Inventory Manual*. Palo Alto, CA: Consult. Psychol. Press. 3rd ed.

- Maslach C, Leiter MP. 1997. *The Truth About Burnout*. San Francisco: Jossey-Bass
- Maslach C, Schaufeli WB. 1993. Historical and conceptual development of burnout. See Schaufeli et al 1993, pp. 1–16
- Peiro JM, Gonzalez-Roma V, Tordera N, Manas MA. 2001. Does role stress predict burnout over time among health care professionals? *Psychol. Health*. In press
- Pines A, Aronson E, Kafry D. 1981. *Burnout: From Tedium to Personal Growth*. New York: Free Press
- Rousseau D. 1995. *Psychological Contracts in Organizations: Understanding Written and Unwritten Agreements*. Thousand Oaks, CA: Sage
- Schaufeli WB, Bakker AB, Hoogduin K, Schaa C, Kladler A. 2001. The clinical validity of the Maslach Burnout Inventory and the Burnout Measure. *Psychol. Health*. In press
- Schaufeli WB, Enzmann D. 1998. *The Burnout Companion to Study & Practice: A Critical Analysis*. Philadelphia: Taylor & Francis
- Schaufeli WB, Janczur B. 1994. Burnout among nurses. A Polish-Dutch comparison. *J. Cross-Cult. Psychol.* 25:95–113
- Schaufeli WB, Maslach C, Marek T, eds. 1993. *Professional Burnout: Recent Developments in Theory and Research*. Washington, DC: Taylor & Francis
- Schaufeli WB, van Dierendonck D. 2000. *Utrechtse Burnout Schaal-UBOS: Handleiding (Utrecht Burnout Scale-UBOS: Test-manual)*. Lisse, Neth.: Swets & Zeitlinger
- Semmer N. 1996. Individual differences, work stress, and health. In *Handbook of Work and Health Psychology*, ed. MJ Schabracq, JAM Winnubst, CL Cooper, pp. 51–86. Chichester, UK: Wiley
- Shirom A. 1989. Burnout in work organizations. In *International Review of Industrial and Organizational Psychology*, ed. CL Cooper, I Robertson, pp. 25–48. New York: Wiley
- van Dierendonck D, Schaufeli WB, Buunk BP. 1998. The evaluation of an individual burnout intervention program: the role of inequity and social support. *J. Appl. Psychol.* 83:392–407
- Warr PB. 1987. *Work, Unemployment and Mental Health*. Oxford, UK: Clarendon
- Watson D, Tellegen A. 1985. Toward a consensual structure of mood. *Psychol. Bull.* 98:219–35
- World Health Organ. 1992. *The ICD-10 Classification of Mental and Behavioral Disorders*. Geneva: WHO
- Zapf D, Seifert C, Schmutte B, Mertini H. 2001. Emotion work and job stressors and their effects on burnout. *Psychol. Health*. In press