

CHAPTER 5

MEASURING BURNOUT

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INTRODUCTION

THE phenomenon of “burnout” emerged as a major social issue in the United States in the mid-1970s, and its importance has grown significantly over the past thirty years. Burnout is recognized as a potential problem within a broad range of occupations, and within many different countries. Much has been written about what burnout is, and what to do about it, and there is a continuing drive to identify effective solutions. An inherent need in all of this work is the ability to assess burnout, in order to establish where and when it is occurring, with whom and to what degree, what is causing it and what is ameliorating it, and so on. Various measures have been developed over the years, based on different assumptions about what burnout is, and with different audiences and goals in mind—either a more research focus on empirical tests of theoretical hypotheses, or a more clinical focus on diagnosis and treatment.

In this chapter, we will review the history of the burnout concept, and the debates about how best to define it and thus measure it. The primary burnout measure, which continues to be the most widely used and is considered to be the “gold standard” for work on burnout, is the Maslach Burnout Inventory (MBI), and we

will describe that measure in some detail. We will then review the more recent history about the concept of engagement, the positive opposite of burnout, and the parallel debates about both its definition and assessment.

THE HISTORY OF BURNOUT

Although the birth of the burnout concept, as we know it today, began in the 1970s, that does not mean that the problem itself suddenly burst on to the scene at that time. 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 in people's lives. Earlier writing, both fictional and non-fictional, described similar phenomena, including extreme fatigue and the loss of idealism and passion for one's job. Perhaps the clearest example is Greene's 1961 novel, *A Burnt Out Case*, in which a spiritually tormented and disillusioned architect quits his job and withdraws into the African jungle. It is probably fair to say that burnout had been identified as a problem by both social commentators and practitioners long before it had a recognized name and had become a focus of systematic study by researchers.

And it was the identification of that name, "burnout," which has such evocative power to capture the psychological reality of people's experiences in the workplace, that occurred in the 1970s. The origins of its usage are somewhat murky, but appear to come from the illicit drug scene, where "burnout" referred to the physical effects of chronic drug abuse. Counselors and therapists who worked with drug addicts borrowed the term to describe their own psychological deterioration and stress. This use of "burnout" was reported by a clinical psychologist, Herbert Freudenberger (1974), in a volume of articles about free clinics. At that same time, a social psychologist, Christina Maslach, was conducting exploratory research with workers in healthcare and human service occupations, studying how they coped with strong emotional arousal on the job. During the course of the interviews, some of the workers described their psychological difficulties as "burnout," and Maslach shifted her focus to describe this phenomenon (1976). For both Freudenberger and Maslach, burnout was rooted within caregiving and service occupations, in which the core of the job is the relationship between provider and recipient. This interpersonal context of the job meant that, from the beginning, burnout was studied not simply 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 other people.

The initial publications by Maslach and Freudenberger were reprinted widely, and then followed by an explosion of articles, editorials, and letters describing personal case studies. Short self-tests immediately appeared in popular magazines, along with the promise to readers to find out “if you’re burned out or still on fire,” or “have you got a one-alarm or two-alarm blaze.” The items for these tests varied widely in terms of the symptoms or problems to which they referred, and seem to have been chosen largely on presumed face validity. For example, some items included “are you too busy to do even routine things like make phone calls or read reports or send out your Christmas cards?” or “does sex seem like more trouble than it’s worth?” or “after work I often feel like relaxing with a drink of alcohol.”

Subsequently, more serious measures of burnout were developed, and psychometric research was conducted to establish their reliability and validity. Once such measures were available, more systematic research began to be conducted on the burnout phenomenon. The initial research on burnout was concentrated in the United States, and then it gradually expanded to other English-speaking countries, such as Canada and Great Britain. With the translations of articles and research measures into other languages, burnout began to be studied in many European countries and in Israel. Currently, burnout research is being conducted in many other countries around the world, with the bulk of the work occurring in post-industrialized nations (see reviews by Halbesleben and Buckley 2004; Schaufeli and Enzmann 1998; Maslach, Schaufeli, and Leiter 2001; Maslach and Leiter 2005).

DEFINING BURNOUT

The initial descriptions of burnout by Freudenberger and Maslach generated a tremendous amount of attention and subsequent discussion and debate about this experience. Different authors proposed different definitions of the phenomenon, and made different assumptions about its causes and effects. What is important to note is that all of these many definitions were based on experiential descriptions, and not on theoretical models. The word “burnout” (or “burn-out,” as it was initially spelled) was clearly the “language of the people,” and as such it was used to evoke the lived realities of the workplace; thus it is not surprising that so many varying perspectives were expressed. An additional downside of the populist origins of burnout was that it was often dismissed as “pop psychology” and as unworthy of serious scholarly attention, with the consequence that the phenomenon was largely ignored within relevant research fields until much later.

This lack of agreement on a standard, accepted definition of burnout during these early years clearly posed a challenge for the development of any systematic

inquiry into the phenomenon. However, a closer analysis of these varying perspectives revealed some common threads, and provided the base for some initial agreement about the key dimensions of burnout (Maslach 1982). What was common to all definitions was that burnout occurs at an individual level; that it is an internal psychological experience involving feelings, attitudes, motives, and expectations; and that it is a negative experience for the individual, in that it concerns problems, distress, discomfort, dysfunction, and/or negative consequences.

In terms of core aspects, or dimensions, of burnout, some definitions focused on a single one while others mentioned multiple dimensions. The dimension on which there was (and continues to be) the most agreement is exhaustion. It has been also described as wearing out, loss of energy, depletion, debilitation, and fatigue. Although sometimes this exhaustion is a physical one, often a psychological or emotional exhaustion is described as central to burnout, i.e., a loss of feeling and concern. A second dimension of these definitions was a negative shift in responses to others: depersonalization, negative or inappropriate attitudes toward clients, irritability, loss of idealism, and withdrawal. Most discussions of this dimension emphasized its movement (in a negative direction) over time—a movement that was also called a shift, change, development, or accumulation. A third dimension found in these definitions was a negative response toward oneself and one's personal accomplishments, also described as depression, low self-esteem, low morale, reduced productivity or capability, and an inability to cope.

In order to make further progress on establishing a common definition of burnout, it was necessary to go beyond the initial anecdotal descriptions and lack of guiding theory. Researchers began to conduct more extensive qualitative research, which involved interviews, surveys, and field observations of employees in caregiving and human services professions. At first, the focus was more on health care, because of its explicit recognition of the challenges of maintaining a “detached concern” and of the negative effects of burnout. Soon, however, exploratory studies were being done in the social services, mental health, criminal justice, and education fields, as members of these professions began to recognize burnout as a shared problem. The decision to use each of these subject populations was sometimes serendipitous, as informants in one group would often refer researchers to people in the next. Similar themes emerged from these interviews, although the specific content differed as a function of the type of occupation (e.g., differences between working with students or with delinquent adolescents).

This evidence of a parallel pattern suggested that burnout was not just some idiosyncratic response to stress, but was a syndrome with some identifiable regularities. The recurring themes were (a) the primacy of exhaustion, (b) the subsequent negative shift in response to others, and (c) a negative self-assessment of professional competence. To further refine these ideas into a clear definition of the phenomenon, and to develop a standardized method for assessing it, researchers began to develop self-assessment measures and to conduct more systematic psychometric studies.

Several different burnout measures were developed according to this inductive approach (Schaufeli, Enzmann and Girault 1993). The common procedure was to derive a set of items that seemed to capture the themes emerging from the earlier qualitative research. Factor analysis of these items identified one or more clusters that were relevant to these themes. Confirmation of these themes, along with tests of hypotheses about the links between burnout and other factors, constituted the psychometric test of a definition of burnout.

The clear definition that has emerged from all this research is that burnout is 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 distancing dimension of burnout. Depersonalization refers to a negative, callous, or excessively detached response to various aspects of the job; cynicism refers to losing an emotional or cognitive involvement with work. 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 in work.

Although several burnout measures were developed in the early 1980s, the only one that assesses all three dimensions is the Maslach Burnout Inventory (MBI). The MBI has dominated the field as a research tool; by the end of the 1990s it was used in 93 percent of the journal articles (Schaufeli and Enzmann 1998). Given its long-standing status as the measure of choice among researchers and practitioners, the next section gives a more thorough presentation of the MBI.

THE MASLACH BURNOUT INVENTORY (MBI)

The original MBI was developed during the late 1970s, based on a program of field research within healthcare and the human services (Maslach and Jackson 1981a; 1981b). It is now known as the MBI-Human Services Survey (MBI-HSS). A second version of the MBI was developed for use by people working in educational settings (the MBI-Educators Survey, or MBI-ES), and was published several years later (Maslach and Jackson 1986). 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. A third, general version of the MBI was developed (the MBI-General Survey, or MBI-GS), given the increasing interest in burnout within occupations that are not so clearly people oriented (Schaufeli et al. 1996). Here, the three components of the burnout construct are conceptualized in slightly broader terms, with respect to the general 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 some revised items, and maintains a consistent factor structure across a variety of occupations. In all three forms, the MBI has been found to be reliable, valid, and easy to administer.

Initial Qualitative Research

The first phase of the measurement development research involved exploratory interviews, on-site field observations, and case studies, and it generated some key themes. It was very clear from all of these interviews 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. Freudenberger's (1974) report of both his own and others' experiences as staff members in "alternative" institutions provided similar evidence. Indeed, Freudenberger (1974) placed particular emphasis on the centrality of exhaustion for burnout, describing it as an end-state of exhaustion caused by excessive demands on one's energy and resources (Freudenberger 1974; 1975). It should be noted that the notion of exhaustion presupposes a prior state of high arousal or overload, rather than one of low arousal or underload. Thus, this definitional component of emotional exhaustion stands in contrast to some other conceptualizations, which view burnout as a response to tedious, boring, and monotonous work (Pines, Aronson, and Kafry 1981). The second component of depersonalization also emerged from these interviews, as human services employees described how they tried to cope with the emotional stresses of their work, or suffered "compassion fatigue" (Figley 1995). Moderating one's compassion for clients by emotional distance from them, "detached concern" (Lief and Fox 1963), 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. Thus, excessive detachment, or depersonalization, could impair performance and be detrimental to the quality of care.

A third general theme had to do with the self-assessment of professional competence. All too often, the experience of emotional turmoil was interpreted as a failure to "be professional" (i.e., non-emotional, cool, objective) and led people to

question their ability to work in a service career. Many practitioners felt that their formal training had not prepared them for the emotional reality of their work and its subsequent impact on their personal functioning.

Psychometric Research

The second phase of the research program was designed to test the ideas generated by the qualitative studies, by using more systematic quantitative methods. This entailed the use of larger participant samples, the development of standardized assessment techniques, and organizational focus groups. The items for the new measure, the MBI, were designed to measure hypothesized aspects of the burnout syndrome, based upon the themes that had emerged from the earlier exploratory research. They were written in the form of statements about personal feelings or attitudes (e.g., "I feel burned out from my work," "I've become more callous toward people since I took this job"). The general form of "recipients" was used in the items to refer to the particular people for whom the participant provided service, care, or treatment (e.g., "I deal very effectively with the problems of my recipients"). The items were answered in terms of the frequency with which the respondent experiences these feelings, on a seven-point, fully anchored scale (0=never, 1=a few times a year, 2=once a month or less, 3=a few times a month, 4=once a week, 5=a few times a week, 6=every day).¹ Because such a response format is least similar to the typical format used in other self-report measures of attitudes and feelings, spurious correlations with other measures (due to similarities of response formats) should be minimized. Furthermore, the explicit anchoring of all seven points on the frequency dimension creates a more standardized response scale, so that the researcher can be fairly certain about the meanings assumed by respondents for each scale value.

The next set of survey studies, which utilized these new items, had two goals: to generate the necessary psychometric data on the developing measurement tool and to test some specific hypotheses about burnout. For example, a study of police officers and their spouses (Jackson and Maslach 1982) obtained independent spouse ratings, which provided evidence of convergent validity for the new measure; however, it also tested some hypotheses about the relationship between burnout and home life. Other studies combined useful psychometric data with investigations of how burnout is related to critical job factors, demographic variables, and coping strategies (Maslach and Jackson 1982; 1984; 1985). Altogether, Maslach and Jackson

¹ In addition to frequency, the original form of the MBI contained a second response dimension of intensity. However, there is now sufficient evidence that shows fairly high correlations between the two dimensions when subscale scores are computed. Therefore, the final form of the MBI only assesses frequency.

collected systematic data from hundreds of people in a wide range of health, social service, and teaching occupations.

A preliminary form of the MBI, which consisted of 47 items, was administered to a sample of 605 people (56 percent male, 44 percent female) from a variety of health and service occupations including: police, counselors, teachers, nurses, social workers, psychiatrists, psychologists, attorneys, physicians, and agency administrators. The resulting data were subjected to a factor analysis using principal factoring with iteration and an orthogonal (varimax) rotation. Ten factors emerged, of which four accounted for over three-fourths of the variance. A set of selection criteria was then applied to the items, yielding a reduction in the number of items from 47 to 25. Items were retained that met all of the following criteria: a factor loading greater than 0.40 on only one of the four factors, a large range of subject response, a relatively low percentage of participants checking the “never” response, and a high item-total correlation.

In order to obtain confirmatory data for the pattern of factors, the 25-item form was administered to a new sample of 420 people (69 percent female, 31 percent male) in the following occupations: nurses, teachers, social workers, probation officers, counselors, mental health workers, and agency administrators. The results of the factor analysis on this second set of data were very similar to those of the first, and so the two samples were combined.

The final factor analysis, based on the combined samples ($n = 1,025$) and using principal factoring with iteration plus an orthogonal rotation, yielded a three-factor solution considered as subscales of the MBI-HSS: Emotional Exhaustion, Depersonalization, and Personal Accomplishment (reverse scored). This three-factor structure has been replicated by a number of independent researchers, using both the original English forms and subsequent translations (Maslach, Jackson, and Leiter 1996; Schaufeli and van Dierendonck 1993; Richardsen and Martinussen 2005; Vanheule, Rosseel, and Vlerick 2007).

MBI Subscales

The final form of this first MBI scale, the MBI-HSS, contains twenty-two items, which are scored in terms of the three subscales. The nine items in the Emotional Exhaustion subscale describe feelings of being emotionally overextended and exhausted by one's work. The item with the highest factor loading (0.84) is the one referring directly to burnout, “I feel burned out from my work.” The five items in the Depersonalization subscale describe an unfeeling and impersonal response towards recipients of one's care or service; for example, “I've become more callous toward people since I took this job.” For both of these two subscales, higher mean scores correspond to higher degrees of experienced burnout. Because some of

the component items on each subscale had low loadings on the other, there is a moderate correlation between the two subscales. Such a correlation is in accord with the results of the earlier qualitative research, in which participants often described how, in response to feelings of exhaustion, they would try to distance and detach themselves from the people who were sources of emotional strain—although this strategy tended to promote a more cynical and hostile perception of these people. In other words, exhaustion and depersonalization seemed to “go together,” and the psychometric research bore this out.

The eight items of the Personal Accomplishment subscale describe feelings of competence and successful achievement in one’s work with people; for example, “I feel I’m positively influencing other people’s lives through my work.” The Personal Accomplishment subscale has only a modest negative correlation with the two other subscales, which suggests that it is not truly the opposite of these two dimensions (as had originally been hypothesized). However, it was clear from the prior qualitative research that people’s self-assessment of their effectiveness on the job was a significant part of their work experience; furthermore, this dimension seemed to be related conceptually to self-efficacy (Bandura 1977; 1982). Thus, the decision was made to include Personal Accomplishment as a separate subscale of the MBI, as a way of assessing people’s satisfaction and pride in their work.

The inclusion of this focus on efficacy and accomplishment was accentuated by the fact that the items with the strongest psychometric properties were all positively worded, which meant that this subscale also differed in affective loading from the other two. Rather than develop a new set of negatively worded items, Maslach and Jackson (1981a; 1981b) decided to retain the positive ones, but to use a reverse scoring process. Thus, the assumption is that lower mean scores on Personal Accomplishment correspond to higher degrees of burnout. It should be noted that this reverse scoring procedure has made the MBI more unwieldy for users (who have to score three subscales, and one of them differently). Critics have also argued that if the intent is to actually assess the negative end of that dimension (i.e., reduced personal accomplishment, or inefficacy) then the subscale should be composed of negatively worded items, and not positive ones. A recent study has done just that, by creating and validating an “inefficacy” scale for the MBI (Breso, Salanova, and Schaufeli 2007).

Alternative Versions of the MBI

The second version of the MBI, the MBI-ES, made only one modification of the original measure: it changed the word “recipient” to “student.” In the education profession, students are the educator’s recipients, and so this change was made to ensure clarity and consistency in the interpretation of the items. Several studies

substantiated the validity and reliability of the MBI-ES with these changes (Maslach, Jackson, and Leiter 1996; Schaufeli, Daamen, and van Mierlo 1994).

The third version of the MBI, the MBI-GS, involved more extensive modifications of the original measure. This was because some researchers had used the MBI-HSS scale, modified or unmodified, with occupational groups other than human-service providers. These researchers found that on the MBI-HSS subscales, not only did the scores of the groups they studied differ from norms established with human service providers, the differentiation between the three subscales was not always maintained. The goal, then, was to adapt and extend the MBI to occupations that did not have a primary focus on a service relationship. Thus, the MBI-GS broadened the definition of burnout so that it referred to the work in general.

The MBI-GS has sixteen items and comprises three subscales that parallel the MBI-HSS: Exhaustion (5 items), Cynicism (5 items), and Professional Efficacy (6 items). The Exhaustion items were slightly modified where necessary to be generic and without direct reference to service recipients (for example, "Working with people all day is really a strain for me" was modified to "Working all day is really a strain for me"). The Professional Efficacy items were modified to be both generic and more clearly focused on expectations of efficacy: for example, "At my work, I feel confident that I am effective at getting things done." The Cynicism items were revised more extensively to replace the Depersonalization subscale, given that depersonalization is the quality of burnout that was most exclusively associated with human service work. The new Cynicism items reflect a negative or distant attitude towards the job; for example, "I have become less enthusiastic about my work" or "I doubt the significance of my work."

The psychometric research on the MBI-GS proceeded from a multicultural base, with the scale administered to participants in their native languages in Canada (English), the Netherlands, and Finland. The occupational groups included clerical and maintenance workers, civil servants, technologists, computer workers, military personnel, rural workers, and managers. In addition, several healthcare samples (nurses, psychiatric workers) were utilized to establish the comparability of the MBI-GS scores with those generated by the original MBI-HSS. The factor structure of the MBI-GS was tested with a confirmatory factor analysis using LISREL. Beginning with a 28-item version of the scale, the analyses identified 24 items that met criteria regarding skew and kurtosis (less than | 2.00 |) and frequency of missing responses (less than 3.00 percent). A series of regression analyses and factor analyses reduced the number of items to 16. This three-factor structure was confirmed across occupational groups and across national samples (Leiter and Schaufeli 1996; Schutte et al. 2000; Taris, Schreurs, and Schaufeli 1999; Bakker, Demerouti and Schaufeli 2002; Richardsen and Martinussen 2005; Kitaoka-Higashiguchi et al. 2004). The confirmation of a three-factor structure for the MBI-GS that parallels that of the MBI-HSS provides evidence that burnout is a general phenomenon that is not limited to the human services.

ISSUES IN MEASURING BURNOUT

From the beginning of the use of the MBI, there have been debates and discussions about its conceptualization of burnout and the format of its measurement. Such issues are a normal part of the development of a new construct, and some of these have led to clear progress in understanding the phenomenon (Maslach and Schaufeli 1993). For example, the earliest debates about burnout centered on whether it was truly a new construct or simply an “old” phenomenon (e.g., depression, job dissatisfaction) with a new label. Subsequent research has not only been able to distinguish between these constructs, but has presented a more nuanced understanding of the complex relationships between them (Leiter and Durup 1994; Schaufeli et al. 2001).

Another debate focused on whether or not burnout was limited to human services occupations, given that the MBI emerged from these fields (which continue to predominate in burnout research). Some argued that burnout could be translated into a broader range of work situations, while others claimed that such an adaptation would transform the basic concept into something else. Still others argued that burnout could be a useful construct within non-job domains, such as marriage and parenting. As described earlier, subsequent research established the general viability of the burnout construct across many occupations and developed a new version of the MBI, the MBI-GS.

There are some core themes that run through these debates, and these will be addressed in this next section. The first theme has to do with the multidimensional framework of the MBI, and whether or not that is better than a single dimensional model. A second theme concerns the MBI formulation of burnout as a continuous variable, rather than as a dichotomous one. Both of these themes are related to some important distinctions between researchers and practitioners in terms of their interest in burnout and the particular perspective they bring to it.

Multiple or Single Dimensions

In the earliest years of burnout research, when many people were developing various ways to measure it, there was already a distinction between those who conceived of burnout as a unitary construct (e.g., the Staff Burnout Scale for Health Professionals—SBS-HP; Jones 1980), and those who considered it to be multidimensional (e.g., the Emener–Luck Burnout Scale—ELBOS; Emener, Luck, and Gohs 1982). Undoubtedly, this basic difference was due to a number of factors, including differences in conceptual assumptions, methodological approach, and assessment content. The multiple dimensions of the MBI clearly emerged from the prior qualitative and quantitative research studies, and any later modifications of

the measure were based on subsequent research findings. This more conservative, empirically driven approach was predicated on the fact that relatively little was actually known about burnout at that time, and thus any assumptions needed to be tested before being accepted.

Scoring challenges

The three dimensions of the MBI meant that it generates three scores for every individual respondent, and thus it poses special statistical challenges for researchers trying to study the entire syndrome. These subscale scores have always been considered separately, so that researchers can study the interrelationships between these distinct dimensions, as well as their differential correlates (e.g., the job characteristics that are linked to cynicism may be different than those related to efficacy). There is no a priori theory about whether and how these subscale scores should be combined, and there is also the risk that any aggregate score will mask important variations in its component parts. Thus, from a purely research perspective, the decision to treat the three MBI dimensions separately makes sense.

But it does not make as much sense to practitioners and the general public, who view burnout as a single, unitary concept—and who want to be able to assess burnout with a measure that produces a single score. From this perspective, the MBI is too complicated and does not provide a simple answer. Given that the MBI was developed as a research tool, and not as a diagnostic one, this complaint is not surprising. However, the challenge is how to develop a one-dimensional measure that will clearly capture the same underlying burnout construct.

Over the years, there have been varied attempts to deal with this issue. Some people have combined all three MBI scores into a single one, using either a simple additive model or one with item weightings or one with a reduced number of items. A different approach has been taken by the phase model, in which the three burnout dimensions are split into high and low categories, yielding eight different patterns, or phases, of burnout (Golembiewski and Munzenrider 1988). None of these attempts has proven to be successful, and some of them have been criticized for impoverishing the burnout construct (Leiter 1989; 1993).

A decade after the publication of the MBI, the development of more sophisticated methodology and statistical tools, such as LISREL (Byrne 1989; Jöreskog and Sörbom 1989), alleviated some of the challenges of analyzing a three-factor model of burnout. Researchers could now manage complex constructs, and were able to analyze the interrelationships between the burnout dimensions and other factors, and to develop structural models. As a result, researchers have been able to examine the contribution of many potential influences and consequences simultaneously, separating unique contributors from those that are redundant. These statistical techniques were a great boon to burnout researchers, but did not address the wish of practitioners for a simple scale with a single score. The challenge of

a complex diagnostic criterion for a syndrome is not unique to burnout: many medical conditions and nearly every psychiatric syndrome require multiple criteria for a conclusive diagnosis. From that perspective, basing a diagnosis of burnout on a single questionnaire score oversimplifies the construct. The result would be unlikely to contribute meaningfully to either research or practice.

The single dimension of exhaustion

In contrast to the attempt to combine the three dimensions of burnout into a single one, an alternative approach has been to reduce burnout to just one of these dimensions, namely exhaustion. As noted earlier, all theoretical perspectives on burnout have included exhaustion as a key dimension. In the research literature on burnout, exhaustion is the most widely reported and the most thoroughly analyzed component of this syndrome. The concept of exhaustion captures the basic stress experienced by an individual, as it refers to feelings of being overextended and depleted of one's emotional and physical resources. When people describe themselves or others as experiencing burnout, they are often referring to the experience of exhaustion (Pick and Leiter 1991). In addition to the general public, professionals and policy makers often consider exhaustion as the equivalent of burnout (an issue that will be addressed in a later section).

The strong identification of exhaustion with burnout has led several theorists to criticize the multidimensional framework of the MBI and to argue that exhaustion is the one and only hallmark of burnout. Several early conceptualizations of burnout considered exhaustion to be the sole defining criterion (Freudenberger 1983; Pines, Aronson, and Kafry 1981; Malach-Pines 2005). Although more recent theories make distinctions between various aspects of exhaustion—e.g., physical fatigue, emotional exhaustion, and cognitive weariness (Shirom and Melamed 2005) or physical and psychological exhaustion (Kristensen et al. 2005)—their measures inevitably produce a single overriding factor of exhaustion. Moreover, these critics of the MBI argue that the correlations among the MBI's three dimensions are not strong enough to justify calling them a syndrome. In other words, the dimensions of cynicism and efficacy are incidental and/or unnecessary for understanding the presumed unitary nature of the concept of burnout.

However, the fact that exhaustion is a necessary criterion for burnout does not mean it is sufficient. Indeed, if it were sufficient, then it should just be recognized for what it is, and called "exhaustion." There is no reason to give it a new label of "burnout," which implies a new construct (to do otherwise is to be open to the criticism of pouring old wine into a new bottle). Of the three MBI dimensions, exhaustion is the closest to an orthodox stress variable. The factors hypothesized to relate to exhaustion are similar to those in the general literature on stress, and so the similar findings are not unexpected. Although this similarity validates the location of the burnout experience within the stress domain, it fails to capture the critical

aspects of the relationship people have with their work, and thus it does not shed new light on how people cope with interpersonal stressors in the workplace.

This is where the other two dimensions of burnout become important for understanding the overall phenomenon. 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—a theme that came out repeatedly in the initial developmental research. Cynicism (or 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 indifferent 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 is found consistently in burnout research, across a wide range of organizational and occupational settings. Early theorizing about burnout considered cynicism to be a detrimental coping response to exhaustion (Leiter 1993; Maslach 1982), but the persistent relationship between these two dimensions also suggests a different interpretation—exhaustion makes it impossible to sustain intense involvement in work. A recent study using two longitudinal samples provides evidence for both interpretations: on the one hand emotional exhaustion predicted cynicism, suggesting that exhaustion undermines intense involvement, whereas on the other hand, cynicism predicted emotional exhaustion, suggesting that cynicism is a detrimental coping response (Taris et al. 2005). The former effect was stronger and more consistent than the latter. Whatever their causal relationship, exhaustion (the inability to perform at the job) and cynicism (the unwillingness to perform at the job) are two linked and inseparable parts of the burnout phenomenon (Schaufeli and Taris 2005). Although individuals may sometimes show incompatible MBI scores on exhaustion and cynicism (e.g., high on one but low on the other) this “incompatibility” should not be viewed as a lack of a unitary construct; rather, such scores can be used to predict future individual change, as the incompatibility will resolve towards consistency over time (Maslach and Leiter 2008).

Recently, an alternative burnout questionnaire has been proposed—the Oldenburg Burnout Inventory (OLBI)—that includes both core dimensions, dubbed exhaustion and disengagement from work (Demerouti et al. 2002; Halbesleben and Demerouti 2005). Contrary to the MBI that includes only the affective aspects of exhaustion, the OLBI also includes cognitive and physical aspects. Moreover, the OLBI features questions that have balanced positive and negative wording. Despite these differences, convergent validity has been shown between the MBI and the OLBI as far as the exhaustion and cynicism/disengagement scales are concerned.

The relationship of inefficacy to the other two aspects of burnout is somewhat more independent and more complex. In some instances, it appears to be a function, to some degree, of either exhaustion or cynicism, or a combination of the two (Byrne 1994; Lee and 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, the experience of exhaustion or cynicism interferes 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). Here the lack of efficacy seems to arise more clearly from a lack of relevant resources, while exhaustion and cynicism emerge from the presence of work overload and social conflict. An alternative view is that inefficacy is more strongly related to personality than are the two other burnout dimensions (Schaufeli and Enzmann 1998). Although diminished efficacy is not inevitable, employees who have lost confidence in their abilities in the presence of chronic exhaustion and cynicism clearly suffer more than those who maintain their self-confidence. In sum, the combined experience of exhaustion, cynicism, and—with some reservations—inefficacy goes beyond more limited concepts of workplace fatigue. It requires the distinct term of “burnout.”

Continuous or Dichotomous Construct

A continuing theme from the early days of work on burnout has been the question of whether it should be conceptualized as a continuous phenomenon, which ranges from an absence to mild to severe, or as a dichotomous phenomenon, which is either present or absent. For example, one proposal distinguished between a Burnout Stress Syndrome (BOSS) and a Burnout Mental Disability (BOMD); the former was defined as the “cluster of feelings and behaviors most commonly found in stressful or highly frustrating work environments,” whereas the latter was described as the “serious, clinically significant pattern of personal distress and diminished performance which is the end state of the burnout process” (Paine 1982). Similarly, a later analysis argued for differentiating between the process of burning out and a state conception of burnout and depression (Hallsten 1993), and between “wornout” and burnout (Hallsten 2005). Implicit in all such proposals is the assumption that there is some point at which the burnout experience becomes sufficiently severe as to constitute a serious problem.

Among researchers, burnout has been defined as a continuous variable. The MBI and other research measures of burnout produce continuous scores, on either one or multiple dimensions. The usual procedure in burnout research is to regress burnout levels on other continuous variables, by using correlational techniques, such as ordinary regression analyses and structural equation modeling. Analyses

contrast respondents on their relative burnout scores, rather than on some absolute criterion score. However, among practitioners, burnout is viewed as a discrete state that either applies to a particular person or does not. The latter perspective fits well with a medical model. In contrast to researchers, who usually work with continuous phenomena, physicians work with dichotomies, such as sick versus healthy, diabetic versus non-diabetic, and high versus low blood pressure. Although informed by continuous scales, such as blood pressure scores, medical diagnosis is an all or nothing categorization. Medical practitioners also favor dichotomous diagnoses when informing decisions on disability insurance claims. Therefore, in epidemiological publications on burnout, instead of group means, proportions of burnout “cases” are identified (i.e., prevalence and incidence rates). In a similar vein, in occupational health publications, instead of correlations, relative risks are calculated that predict the occurrence of burnout “cases,” for instance by using odds ratios. Thus, researchers and practitioners have two fundamentally different definitions of burnout: for researchers, burnout is a continuous phenomenon, whereas for health professionals and other practitioners, it is a dichotomy.

The challenge, then, has been to identify how to translate the continuous scores of a research measure into a dichotomous burnout classification—much like a certain temperature on a continuous thermometer scale signals the presence or absence of fever. Dichotomous categorizations use either statistical or diagnostic criteria. In the former case, cut-off points are determined on a purely arbitrary and statistical basis. For example, the MBI Manual presents the distribution of scores for its normative samples and divides them into thirds; the scoring range in each third is used to indicate “low,” “average,” and “high” scores on burnout (Maslach, Jackson, and Leiter 1996).

An alternative strategy is to use a particular external criterion—for instance, an independent burnout diagnosis. One approach used work-related neurasthenia, as defined in the ICD-10 (1992), as the equivalent of clinical burnout (Schaufeli et al. 2001).² According to the ICD-10, a neurasthenic diagnosis (code F43.8) requires: (1) persistent and increased fatigue or weakness after minimal (mental) effort; (2) at least two out of seven distress symptoms such as irritability and inability to relax; (3) the absence of other disorders such as mood disorder or anxiety disorder. According to Schaufeli et al. (2001), in order to be diagnosed as clinical burnout, the neurasthenic symptoms should additionally be work related, and the individual should receive professional treatment. Based on these diagnostic criteria, clinically validated cut-off scores for each of the three MBI scales were established. Additional research confirmed the validity of the MBI cut-off points and also established a decision rule for combining the scores of the three burnout dimensions: an individual is considered to be clinically burned out when he or she

² Please note that in the ICD-10 classification system “burnout” appears as a label and a code (Z73.0) rather than a diagnosis.

has a “high” score on exhaustion in combination with a “high” score on either of the two remaining MBI dimensions (Brenninkmeijer and Van Yperen 2003; Roelofs et al. 2005). This decision rule, which is based on clinically validated cut-off points, enables the MBI—a multidimensional continuous measure—to be translated into a dichotomy that can be used by health professionals in order to diagnose burnout.

In the Netherlands, this diagnostic tool is included in the practice guidelines for managing stress-related disorders in occupational and primary healthcare, as issued by the Royal Dutch Medical Association in 2000. According to these guidelines, burnout is defined as work-related neurasthenia that includes long-term loss of the occupational role, and the diagnostic tool enables physicians to discriminate between those who suffer from severe burnout and those who do not. The introduction of the guidelines, which are also based on academic research on burnout, conveys the importance of diagnosing burnout in the medical field, and stimulates the attention of physicians to this phenomenon. It is noteworthy that this process of transforming burnout from a psychological phenomenon into a medical diagnosis is prevalent in several European countries, such as the Netherlands and Sweden, where tradition and legislation have fostered the medical use of burnout. A similar process has not taken place in other parts of the world, such as North America, so it will be interesting to see whether the European model will influence others to follow suit.

What is also important to note is that, despite the use of the multidimensional MBI in developing the Dutch guidelines, work-related neurasthenia has been largely reduced to the single dimension of exhaustion. The main characteristic of neurasthenia is persistent fatigue and weakness. The use of burnout as a medical diagnosis implies one-dimensionality, and it is quite plausible that exhaustion emerges as that single dimension, as it is the most obvious burnout symptom. Moreover, since 1997 the Dutch census bureau has been assessing “burnout” among the working population by using an index of work-related exhaustion (that is based on the MBI) in its annual national survey. As a consequence, public discourse about burnout in the Netherlands is increasingly limited to exhaustion alone.

WORK ENGAGEMENT: THE POSITIVE CONTRAST TO BURNOUT

Burnout, as an unpleasant experience of worklife with negative implications for performance, health, and well-being, stands in contrast to a neutral existence at work. In a neutral state, employees rarely feel exhausted, distressed, cynical, or discouraged. Performance is adequate, health is normal, and rewards are sufficient.

Although a neutral worklife has clear benefits over burnout, it does not encompass the full range of potential experiences at work. Worklife provides opportunities for exceptional performance, joyous experiences, and deep fulfillment. By defining a positive alternative to burnout, the objective of interventions is not simply alleviating a negative experience, but supporting a positive alternative.

A recent development in burnout research has been to expand the focus to the positive antithesis of burnout, rather than just focusing on the negative state that it represents. This positive state has been called work engagement, but it has been conceptualized in different ways. One approach has been to define engagement as the opposite of burnout; thus it is comprised of the same three basic dimensions, but with the positive endpoints of energy, involvement, and efficacy (Leiter and Maslach 1998). By implication, engagement is assessed by the opposite pattern of scores on the three MBI dimensions. A different approach has defined engagement as a persistent, positive affective-motivational state of fulfillment that is characterized by the three components of vigor, dedication, and absorption. Schaufeli and his colleagues have developed a different measure to assess this positive state, the Utrecht Work Engagement Scale (UWES), and the preliminary results show that while the scores are negatively correlated with burnout, they are most strongly related to the positive endpoint of efficacy (see Maslach, Schaufeli, and Leiter 2001 for a more extensive comparison of these two approaches).

Schaufeli and Bakker (2004) present three arguments for the UWES over the MBI-GS as an operationalization of work engagement. First, they contend that defining engagement solely through energy, involvement, and efficacy, as indicated by positive scores on the three dimensions of the MBI, neglects important dimensions of the engagement construct; i.e., there is more to engagement than energy, involvement, and efficacy. Secondly, the MBI-GS conceptualizes burnout and engagement as bipolar constructs rather than as two constructs that are independent of one another. Third, as the ranges of two of the MBI-GS subscales are limited to negative experiences, it fails to capture positive experiences associated with work engagement.

The UWES conceptualization of work engagement includes vigor, which provides a direct contrast with exhaustion on the energy dimension. The dedication component addresses the involvement dimension (González-Romá et al. 2002). The alignment of the vigor and dedication subscales with their counterparts from the MBI-GS appears less than optimal. For example, vigor is intended to assess from a positive perspective the same underlying dimension of energy that the MBI exhaustion subscale assesses from a negative perspective. Yet, vigor correlates more strongly with the other UWES subscales than it does with the MBI exhaustion scale. This pattern suggests that an underlying quality pertaining to all three UWES subscales is more salient than the subscales' alignment with the distinct constructs they are intended to assess. The three UWES subscales appear to measure a single construct with a strong degree of internal consistency, perhaps better considered

as a one-dimensional construct. It does not appear to measure the opposite of burnout.

Schaufeli and Bakker (2004) present a confirmatory factor analysis to demonstrate a better fit for a model that includes the professional efficacy subscale of the MBI-GS with the UWES subscales as a positively worded factor, in contrast with the negatively worded factor based on the exhaustion and cynicism subscales. Although they present this analysis as demonstrating contrasting dynamics of burnout versus work engagement, the results invite alternative interpretations.

Currently, the construct of work engagement continues to seek its ideal operationalization. From the perspective of the Maslach and Leiter (1997) definition, a measure would include items that capture directly the positive qualities of energy and involvement. From the perspective of the Schaufeli and Bakker (2004) definition, the positioning of work engagement vis-à-vis burnout requires more conceptual development: at this point the relationship of burnout to what the UWES assesses remains unclear.

The emphasis on work engagement has picked up a theme from the original development of the three-factor MBI. The results of both the qualitative and psychometric research pointed to the importance of people's sense of personal accomplishment and achievement on the job. The development and experience of burnout has implications for effective and fulfilling relationships with work. A contemporary measurement challenge is developing the means to capture the full range of these work experiences.

CONCLUSION

We have considered the measurement of burnout from a historical perspective, emphasizing the most broadly used instrument, the Maslach Burnout Inventory. Both the original Human Services Scale (MBI-HSS) and the more recent General Scale (MBI-GS) have reflected cultural assumptions about work and its potential for distressful experiences. The two forms of this questionnaire have also influenced how researchers around the world have studied the syndrome. Although a preference for a one-dimensional burnout measure has been a recurring theme in the history of burnout, the depth and breadth provided by the more challenging three-dimensional model continues to dominate the field.

This chapter is exclusively devoted to the measurement of burnout. Measurement reflects the central concepts that define the syndrome. But accurate measurement is not synonymous with thorough understanding. That requires defining the personal and contextual precursors of burnout, as well as its physical, emotional,

cognitive, and social impact. We have worked with two complementary models of burnout that consider Areas of Worklife (Leiter and Maslach 2004) and Job Demands/Resources (Schaufeli and Bakker 2004). The former considers burnout and work engagement—both assessed with the MBI—to result from mismatches in particular areas such as workload, control, reward, community, fairness, and values. The latter assumes that burnout and engagement—as assessed with the MBI and the UWES, respectively—result from a particular interplay of job demands and job resources.

Some controversies about measurement and concepts can only be addressed through theory-guided research that identifies the processes underlying the experience of burnout or work engagement. Psychometrics alone are not sufficient for a definitive resolution. The integration of studies currently in progress around the world will clarify these phenomena and contribute to developing effective interventions to enhance experiences at work. An essential tool in this effort is an accurate, effective measure that is widely applicable across cultures and occupations.

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