AREAS OF WORKLIFE: A STRUCTURED APPROACH TO ORGANIZATIONAL PREDICTORS OF JOB BURNOUT

Michael P. Leiter and Christina Maslach

ABSTRACT

This chapter evaluates a model of the organizational context of burnout with direct reference to a new measure, the Areas of Worklife Scale (AWS). The model proposes a structured framework for considering six areas of worklife – workload, control, reward, community, fairness, and values – that have resonated through the literature on burnout over the previous two decades. The chapter presents extensive data on the AWS, testing a model of the six areas' interrelationships as well as their overall relationship to the three aspects of burnout. The results of these analyses are discussed in reference to the psychometric qualities of the measure and the implications of a structured approach to work environments for future development of research on burnout. Implications for developing workplace interventions are also considered.

INTRODUCTION

For several decades, the term "burnout" has been used to describe a fundamental disconnect between the worker and the workplace. The basic story goes like this:

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the worker entered a job with positive expectations, enthusiasm, and the goal to be successful in the job. Over time, things changed – and now the worker has an overwhelming exhaustion; feelings of frustration, anger and cynicism; and a sense of ineffectiveness and failure. The initial flame has burned out. The experience impairs both personal and social functioning on the job, and thus carries some real costs for the individual worker, the people affected by him or her, and for the organization as a whole. While some people may quit the job as a result of burnout, others will stay on but will only do the bare minimum rather than their very best.

Burnout was recognized as an important social problem by practitioners long before it became a focus of systematic study by researchers. Thus, it was more of a "grass-roots" phenomenon, grounded in the realities of people's experiences in the workplace, rather than a topic derived from a scholarly theory and empirical studies. This pragmatic conceptual framework – of a social problem that needed to be solved – shaped the trajectory of the research on burnout. The early studies followed a "bottom-up" approach of describing and defining the phenomenon, and developing hypotheses about its causes and its effects. Later, this initial work was linked to a wide variety of theoretical perspectives and research literatures in social, clinical, and industrial/organizational psychology (see reviews by Maslach & Schaufeli, 1993; Schaufeli & Enzmann, 1998).

An underlying theme of this pragmatic framework has been to discover solutions to the problem of burnout. From the beginning, the growing research literature was matched (or even outstripped) by a parallel literature of workshop and self-help materials. As burnout became more clearly identified as a form of job stress, it received increasing attention from administrators and policy makers in the workplace. It is thus fair to say that the field of job burnout has always had a primary thrust toward application, in addition to scholarly contributions.

Our recent work has been explicitly designed to bridge the gap between basic and applied research on burnout. Our goal has been to design tools that can be used by both researchers and practitioners – the former to study hypotheses within the context of field studies, and the latter to assess the workplace within the context of organizational interventions. Toward that end, we have developed a new model that draws on the extant research literature on job stress and proposes that six areas of job-person mismatch are the critical sources of burnout (Maslach & Leiter, 1997). We have now developed a new tool to assess these six areas, which can be used as part of a program of organizational assessment and intervention (Leiter & Maslach, 2000). This chapter will provide a comprehensive analysis of our model and measures, and will demonstrate how we are using this approach both for empirical tests and applied interventions.

BURNOUT AND ENGAGEMENT

Burnout is defined as a psychological syndrome of exhaustion, cynicism, and inefficacy, which is experienced in response to chronic job stressors. This definition is a broader statement of the multidimensional model that has been predominant in the burnout field (Maslach, 1993, 1998; Maslach & Jackson, 1981). The original model emerged from research with workers in human service and educational occupations, and thus was framed in terms of the interpersonal relationships that characterize such jobs. However, more recent work has established that the basic model can be broadened to apply to any kind of occupation (Leiter & Schaufeli, 1996; Maslach et al., 1996).

Of the three dimensions of burnout, the exhaustion component represents the basic individual stress experience. It refers to feelings of being overextended and depleted of one's emotional and physical resources. The cynicism component represents the interpersonal context dimension of burnout. It refers to a negative, callous, or excessively detached response to various aspects of the job. It usually develops in response to the overload of exhaustion, and is self-protective, at first, as an emotional buffer of "detached concern." But the risk is that the detachment can result in the loss of idealism and the dehumanization of others. This detachment, or 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 (Maslach et al., 1996). The third component of inefficacy represents the self-evaluation dimension of burnout. It refers to feelings of incompetence and a lack of achievement and productivity in work. In some instances, it appears to be a function, to some degree, of either exhaustion or cynicism, or a combination of the two (Byrne, 1993; 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. 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.

Unlike acute stress reactions, which develop in response to specific critical incidents, burnout is a cumulative reaction to ongoing occupational stressors. With burnout, the emphasis has been more on the process of psychological erosion, and the psychological and social outcomes of this chronic exposure, rather than just the physical ones. Because burnout is a prolonged response to chronic interpersonal stressors on the job, it tends to be fairly stable over time.

Burnout is one end of a continuum in the relationship people establish with their jobs. As a syndrome of exhaustion, cynicism, and inefficacy, it stands in

contrast to the energetic, involved, and effective state of engagement with work. Recently, the multidimensional model of burnout has been expanded to this other end of the continuum (Leiter & Maslach, 1998). Engagement is defined in terms of the same three dimensions as burnout, but the positive end of those dimensions rather than the negative. Thus, engagement consists of a state of high energy (rather than exhaustion), strong involvement (rather than cynicism), and a sense of efficacy (rather than inefficacy).

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.

In terms of application, the concept of engagement may be more functional than burnout. A worksetting that is designed to support the positive development of the three core qualities of energy, involvement, and effectiveness should be successful in promoting the well-being and productivity of its employees. Thus, we have found that a focus on what would promote engagement in the workplace is a better framework for developing effective interventions than a focus simply on what would reduce stress. Moreover, the former is more likely to change the job context, while the latter leads to strategies of changing the person.

The Organizational Context for Burnout and Engagement

Job stress has been recognized as a significant occupational hazard, which can impair both health and work performance (e.g. Sauter & Murphy, 1995). The worker's internal experience of stress is assumed to play a mediating role between the impact of external job demands (stressors) and work-related outcomes (such as absenteeism or illness). This basic mediation model should be especially true of the stress phenomenon of burnout, which involves a prolonged response to chronic interpersonal job stressors. Thus, organizational conditions should influence a worker's experience of burnout or engagement, which in turn will determine outcomes of importance to both the worker and the organization. For example, assessments of employees' level of experienced burnout or engagement

have predicted clients' evaluation of service quality (Leiter et al., 1998) and employees' evaluation of organizational change (Leiter & Harvie, 1998).

Two decades of research on burnout have identified a plethora of organizational risk factors across many occupations in various countries, as well as some work-related outcomes (see Maslach et al., 2001; Schaufeli & Enzmann, 1998). However, there has not been much research that directly tested the mediation model by including measures of all three model components: organizational factors, experienced burnout, and work-related outcomes. One of our recent studies was designed as a first approximation of such a test (Leiter & Maslach, 2003).

In this chapter, we will present not only this initial study on the mediation model, but the psychometric research that led to the development of a key measure of organizational factors, the Areas of Worklife Scale. Our goal has been to develop research tools that are also appropriate for use in applied settings, and this requires measures that are relatively brief and easily accessible to a wide range of employees. The standard measure of burnout, the Maslach Burnout Inventory (Maslach et al., 1996), already meets those criteria. However, there was not a comparable tool that assesses the multiple job stressors that contribute to burnout, so our challenge was to devise a measure of these organizational factors.

Six Areas of Worklife

In reviewing the proliferation of organizational correlates in many studies of burnout and job stress, we had identified six key domains: workload, control, reward, community, fairness, and values (Leiter & Maslach, 1999; Maslach & Leiter, 1997, 1999). The first two areas are reflected in the Demand-Control model of job stress (Karasek & Theorell, 1990), and reward refers to the power of reinforcements to shape behavior. Community captures all of the work on social support and interpersonal conflict, while fairness emerges from the literature on equity and social justice. Finally, the area of values picks up the cognitive-emotional power of job goals and expectations.

Workload

The most obvious, and most commonly discussed area of worklife is overload: job demands exceeding human limits. People have to do too much in too little time with too few resources. Increasing workload has a consistent relationship with burnout, especially with the exhaustion dimension (Cordes & Dougherty, 1993; Maslach et al., 2001; Schaufeli & Enzmann, 1998). Structural models of burnout have shown that exhaustion then mediates the relationship of workload with the other two dimensions of burnout (Lee & Ashforth, 1996; Leiter & Harvie, 1998).

This association reflects the relationship of work demands with occupational stress in the stress and coping literature (Cox et al., 1993).

Both qualitative and quantitative work overload contribute to exhaustion by depleting the capacity of people to meet the demands of the job. The critical point occurs when people are unable to recover from work demands. That is, acute fatigue resulting from an especially demanding event at work – meeting a deadline or addressing a crisis – need not lead to burnout if people have an opportunity to recover during restful periods at work or at home (Shinn et al., 1984). When this kind of overload is a chronic job condition, not an occasional emergency, there is little opportunity to rest, recover, and restore balance. Such exhaustion can lead to a deterioration in the quality of the work and a disruption of collegial relationships.

A sustainable workload, in contrast, provides opportunities to use and refine existing skills as well as to become effective in new areas of activity (Landsbergis, 1988). It builds involvement by opening new opportunities, and by removing concern about work overwhelming personal capacity. A sustainable workload stops the cycle of exhaustion that is a driving force in the experience of burnout for many people.

Control

The Demand-Control theory of job stress (Karasek & Theorell, 1990) has made the case for the enabling role of control. This area includes employees' perceived capacity to influence decisions that affect their work, to exercise professional autonomy, and to gain access to the resources necessary to do an effective job. As human beings, people have the ability to think and solve problems, and want to have the opportunity to make choices and decisions. In other words, they want to have some input into the process of achieving the outcomes for which they will be held accountable. Control problems occur when workers have insufficient authority over their work or are unable to shape the work environment to be consistent with their values. A sense of efficacy is unlikely to occur when workers are feeling buffeted by circumstances or powerful people within the organization.

A major control problem occurs when people experience role conflict. Many burnout studies have found that greater role conflict is strongly and positively associated with greater exhaustion (Cordes & Dougherty, 1993; Maslach et al., 1996). Role conflict arises from multiple authorities with conflicting demands or incongruent values, and people in this situation cannot exercise effective control in their job. Contradictory demands interfere with their capacity to set priorities or to commit themselves fully to their work. Role conflict is not simply an indicator of additional work demands, but is emotionally exhausting in itself (e.g. Siefert et al., 1991; Starnaman & Miller, 1992). Moreover, role conflict is, almost by definition, a direct signal of an authority problem at work. It means that

a worker's preferred role is out of sync with important qualities of the job, such as supervisors' expectations, client demands, or ethical constraints. The critical issue is not the amount or even the type of work demands, but the consistency of those demands with the capacity to determine the job.

Studies that examine role conflict usually also consider role ambiguity – the absence of direction in work. Generally, role ambiguity is associated with greater burnout, but the relationship is not nearly as consistent as that of role conflict (Cordes & Dougherty, 1993; Maslach et al., 1996). Ambiguity may enhance some work contexts by providing the freedom to pursue one's values, while conflict directly inhibits a course of action.

When people have more control in their work, their actions are more freely chosen – and this can lead to greater satisfaction with the job, and more commitment to it. The process of making a decision has an enduring impact on employees' experience of participating in organizational life and the responsibility they take for its outcomes. Participative decision making is a cornerstone of job enrichment strategies (Hackman, 1986) as much because of its power to engender commitment as for its capacity to make good use of knowledge and experience within a group of colleagues. Active participation in organizational decision making has been consistently found to be associated with higher levels of efficacy and lower levels of exhaustion (Cherniss, 1980; Lee & Ashforth, 1993; Leiter, 1992).

Reward

The reward area of worklife addresses the extent to which rewards – monetary, social, and intrinsic – are consistent with expectations. Lack of recognition from service recipients, colleagues, managers, and external stakeholders devalues both the work and the workers, and is closely associated with feelings of inefficacy (Cordes & Dougherty, 1993; Maslach et al., 1996). When people feel neglected by the material and social reward system of an organization, they feel out of sync with its values.

In contrast, consistency in the reward dimension between the person and the job means that there are both material rewards and opportunities for intrinsic satisfaction (Richardsen et al., 1992). Intrinsic rewards (such as pride in doing something of importance and doing it well) can be just as critical as extrinsic rewards, if not more so. What keeps work involving for most people is the pleasure and satisfaction they experience with the day-to-day flow of work that is going well (Leiter, 1992). An enjoyable workflow supports both psychological well being and physical health, and is also the source of recognition from others. The results of various studies have shown that insufficient reward (whether financial, institutional, or social) increases people's vulnerability to burnout (e.g. Chappell & Novak, 1992; Glicken, 1983; Maslanka, 1996; Siefert et al., 1991).

Community

Community is the overall quality of social interaction at work, including issues of conflict, mutual support, closeness, and the capacity to work as a team. 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.

Burnout research has focused primarily on social support from supervisors, coworkers, and family members (Cordes & Dougherty, 1993; Greenglass et al., 1994; Greenglass et al., 1988; Maslach et al., 1996). Distinct patterns have been found for informal coworker support and supervisor support (Jackson et al., 1986; Leiter & Maslach, 1988). Supervisor support has been more consistently associated with exhaustion, reflecting the supervisors' impact on staff members' workload. Coworker support is more closely related to accomplishment or efficacy, reflecting the value staff members put on the expert evaluation by their peers. A sense of community has been found to buffer the impact of feelings of inequity at work (Truchot & Deregard, 2001). Regardless of its specific form, social support has been found to be associated with greater engagement (Leiter & Maslach, 1988; Schnorpfeil et al., 2002).

Research on the social context of burnout has also attended to the broader issues associated with a sense of community in an organization (Drory & Shamir, 1988; Farber, 1984; Royal & Rossi, 1996). Research on community orientation (Buunk & Schaufeli, 1993) provides a distinct but consistent perspective. Both of these approaches consider ways in which the overall quality of personal interactions among people in an organization have an impact on the relationships people have with their work. The consistent finding through this research is that a lively, attentive, responsive community is incompatible with burnout. People's subjective appraisal of their social context – their sense of community with colleagues or their communal orientation towards service recipients – reflects the extent to which the organizational community is consistent with their expectations.

Fairness

Fairness is the extent to which decisions at work are perceived as being fair and people are treated with respect. 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, or

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 voice, then those will be judged as unfair.

Relevant research on procedural justice (e.g. Lawler, 1968; Tyler, 1990) has shown that people are more concerned with the fairness of the process than with the favorableness of the outcome. People use the quality of the procedures, and their own treatment during the decision making process, as an index of their place in the community. They will feel alienated from that community if they are subject to unfair, cursory, or disrespectful decision making. In contrast, a fair decision is one in which people have an opportunity to present their arguments and in which they feel treated with respect and politeness. Thus, fairness shares some qualities with community, as well as with reward.

Fairness is also central to equity theory (Walster et al., 1973), which posits that perceptions of equity or inequity are based on people's determination of the balance between their inputs (i.e. time, effort, and expertise) and outputs (i.e. rewards and recognition). This core notion of inequity is also reflected in the effort-reward imbalance model (Siegrist, 2002). Research based on these theoretical frameworks has found that a lack of reciprocity, or imbalanced social exchange processes, is predictive of burnout (e.g. Bakker et al., 2000; Schaufeli et al., 1996).

Fairness has also emerged as a critical factor in administrative leadership (e.g. White, 1987). Employees who perceive their supervisors as being both fair and supportive are less susceptible to burnout, and are more accepting of major organizational change (Leiter & Harvie, 1997, 1998). It appears that employees value fairness in itself and consider it to be indicative of a genuine concern for the long-term good of the organization's staff, especially during difficult times. When employees are experiencing stress, they look to management not only for problem solving, but for optimism, fairness, and high expectations for organizational and personal performance. They expect that management will give due consideration to people's contributions and will allocate resources and opportunities equitably (and not to the personal advantage of privileged individuals or cliques).

Values

The values area is at the heart of people's relationship with their work. It encompasses the ideals and motivations that originally attracted them to the job. It is the motivating connection between the worker and the workplace that goes beyond the utilitarian exchange of time for money or advancement. Contributing to a meaningful personal goal is a powerful incentive for individuals. When this work contributes as well to the organizational mission, people may be rewarded with additional opportunities for meaningful work. As such,

mutually compatible values produce a self-perpetuating dynamic that supports engagement.

However, when there is a values conflict on the job, it can undermine people's engagement with work. The greater the gap between individual and organizational values, the more often staff members find themselves making a trade-off between work they want to do and work they have to do. 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. 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). In other instances, there may be a conflict between their personal aspirations for their career and the values of the organization, as when people realize that they entered an occupation with mistaken expectations.

One resolution of the tension resulting from value conflicts is to bring personal expectations in line with those of the organization (Stevens & O'Neill, 1983); another is to leave the organization in search of more fulfilling career opportunities (Pick & Leiter, 1991). The distress associated with value conflicts and the lengths to which people go to reduce the associated tension are indicative of their central role in the burnout and engagement process. Research has found that a conflict in values is related to all three dimensions of burnout (Leiter & Harvie, 1997).

MISMATCH BETWEEN PERSON AND THE JOB

A consistent theme throughout this research literature is the problematic relationship between the person and the environment, which is often described in terms of imbalance or misalignment or misfit. For example, the demands of the job exceed the capacity of the individual to cope effectively, or the person's efforts are not reciprocated with equitable rewards. There is a long history within psychology of trying to explain behavior in terms of the interaction of person and environment, and this is particularly evident within the fields of personality and of vocational psychology (e.g. see Chartrand et al., 1995; Walsh et al., 1992). 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 (French et al., 1974, 1982), in which better fit was assumed to predict better adjustment and less stress.

Subsequent theorizing continued to highlight the importance of both individual and contextual factors (see Kahn & Byosiere, 1992), and recent research continues to utilize this person-environment approach (e.g. Finnegan, 2000; Lauver & Kristof-Brown, 2001; O'Reilly et al., 1999).

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 or 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.

We have begun to address this challenge by formulating a model that focuses on the degree of experienced congruence between the person and the six domains of his or her job environment (Maslach & Leiter, 1997). We propose that the greater the perceived gap between the person and the job, the greater the likelihood of burnout; conversely, the greater the consistency, the greater the likelihood of engagement with work. One new aspect of this approach is the focus is on the enduring working *relationship* that people have with their job. This relationship is similar to the notion of a psychological contract (Rousseau, 1995). Problems 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.

A second new aspect of this model is that it specifies not one, but six areas in which this mismatch can take place. In each area, the nature of the job is not in harmony with the nature of people, and the result is the increased exhaustion, cynicism, and inefficacy of burnout. On the other hand, when better compatibility exists in these six areas, then engagement with work is the likely outcome.

The Areas of Worklife Scale

Our goal was to develop a measure that would apply the concept of job-person fit to the assessment of the six key areas of worklife, in a generic format that could be utilized easily by a wide range of employees. We chose to focus on the fit

itself, rather than on the two component parts of person and of job, and thus asked respondents to rate their level of experienced congruence with the job within these six domains. This new measure, the Areas of Worklife Scale, has the potential to provide useful diagnostic information to organizations interested in interventions to deal with burnout (Leiter & Maslach, 2000).

Description of the Measure

The Areas of Worklife Scale (AWS) is comprised of 29 items that produce distinct scores for each of the six areas of worklife: workload (6), control (3), reward (4), community (5), fairness (6), and values (5). Each scale includes positively worded items, e.g. "I have enough time to do what's important in my job" (workload) and negatively worded items, e.g. "Working here forces me to compromise my values" (values). Respondents indicate their degree of agreement with these statements on a 5-point Likert-type scale ranging from 1 (strongly disagree), through 3 (hard to decide), to 5 (strongly agree). The scoring for the negatively worded items is reversed. For each of the six subscales, the AWS defines a job-person fit or match as a high score (greater then 3.00), indicating a higher degree of congruence between the workplace and the respondent's preferences; it defines a mismatch as a low score (less than 3.00), indicating more incongruence between the worker and the workplace. The AWS items were developed from a series of staff surveys conducted by the Centre for Organizational Research and Development (Leiter & Harvie, 1998; Maslach & Leiter, 1997) as a means of assessing the constructs underlying our analysis of the six areas of worklife. The developmental research found that the new scale had a consistent factor structure across these initial samples and showed consistently high correlations with the three burnout dimensions measured by the Maslach Burnout Inventory-General Scale (MBI-GS; which is the general version of the MBI that can be used with all occupations). The AWS is available through Leiter and Maslach (2000) or through Leiter and Maslach (2002).

Samples

The normative sample for the AWS was drawn from a variety of worksettings in the United States (English), Canada (English), Italy (Italian), and Finland (Finnish); the number of participants is noted in Table 1. For those for whom demographic information is available, there were 2,515 males and 5,139 females. In terms of employment status, 6,343 were full time, 1,005 part time, and 112 casual. In terms of age, participants were 18–29 years (650), 30–39 years (1,072), 40–49 years (1,375), 50–59 years (1,061), and 60 and over (139). In terms of supervisory status, the sample included non-supervisory employees (1,151), supervisors (1,545), and management (810).

Table 1. Research Settings.

Setting	Source	*N* of Participants
USA: University Library	Maslach & Leiter	388
USA: University Student Services	Maslach & Leiter	738
Canada: Teachers	Leiter	380
USA: University Library	Maslach & Leiter	285
Finland: Post Office	Aro, Kärnä, Salmela-Aro	756
Italy: Hospital	Maslach, Leiter, & Aroasio	390
Canada: Public Service Employees	Leiter	17
Canada: Hospital	Leiter	2,633
Finland: Hospital	Aro, Kärnä, Salmela-Aro	468
USA: University Administrative Employees	Maslach & Leiter	1005
USA: Retail	Maslach & Leiter	385
Italy: Hospital	Maslach, Leiter, & Aroasio	295
USA: Teachers		39
Canada: Nurses		80
Finland: University Employees	Aro, Kärnä, Salmela-Aro	230
Finland: Postal Workers	Aro, Kärnä, Salmela-Aro	57
Finland: Telecommunications	Aro, Kärnä, Salmela-Aro	193
Total		8,339

Scale Properties

Table 2 displays the means, standard deviations, Cronbach alphas, and correlations among the six areas of worklife and the three subscales of the MBI-GS. The alpha values for all scales meet the 0.70 criterion. All of the correlations among the subscales are significant. (The MBI-GS was not administered with every AWS sample, thus producing only 6,815 cases for the combined sample in contrast with the 7,574 cases for the AWS alone.) The highest correlation of the AWS and the MBI-GS was between Workload and Exhaustion (0.54) while the lowest was between Workload and Efficacy (0.04). The average of the 18 correlations of the AWS with the MBI-GS was |0.26|; the average of the 15 correlations among the AWS subscales was |0.20|.

Principal Components Factor Analyses

A principal components analysis of the normative sample provided evidence supporting a six-factor structure for the AWS. The scree plot determined that eigen values began leveling after six factors: 7.64, 2.53, 1.83, 1.60, 1.33, 1.24. The six factor structure (see Table 3) assigned all 29 items to the appropriate factor. Two items had loadings that were less than |0.50|: Workload6 loaded on Workload +0.46 with a second highest loading of 0.17 on control. Values5 loaded on Values +0.44 with a second highest loading of −0.22 on Fairness. As the second

Table 2. Means, Standard Deviations, Cronbach Alphas, and Correlations: Normative Sample.

	Mean	S.D.	Alpha	Cynicism	Efficacy	Workload	Control	Rewards	Community	Fairness	Values
Exhaustion	2.53	1.49	0.90	0.55	−0.15	−0.53	−0.32	−0.24	−0.29	−0.33	−0.21
Cynicism	1.81	1.35	0.80		−0.31	−0.20	−0.30	−0.28	−0.31	−0.34	−0.35
Efficacy	4.52	1.01	0.74			0.04	0.23	0.17	0.17	0.13	0.20
Workload	2.83	0.84	0.70				0.28	0.19	0.21	0.26	0.13
Control	3.35	0.89	0.70					0.38	0.40	0.47	0.33
Rewards	3.06	0.56	0.82						0.38	0.42	0.26
Community	3.46	0.84	0.82							0.48	0.34
Fairness	2.83	0.83	0.82								0.47
Values	3.43	0.74	0.73								

Note: $N = 6{,}815$, all correlations, $p < 0.001$.

Table 3. Principal Components Factor Analysis.

	Fairness	Community	Workload	Reward	Values	Control
Fair5	**−0.70**	−0.16	0.05	−0.26	−0.11	0.06
Fair4	**0.70**	0.15	−0.09	0.18	0.22	0.19
Fair6	**−0.67**	−0.17	0.09	−0.28	−0.13	0.06
Fair3	**0.65**	0.14	−0.09	0.16	0.15	0.24
Fair1	**0.64**	0.19	−0.14	0.10	0.21	0.22
Fair2	**0.54**	0.07	−0.04	−0.04	0.08	0.13
Community3	0.14	**0.84**	−0.07	0.12	0.10	0.10
Community4	0.18	**0.80**	−0.09	0.11	0.08	0.12
Community2	0.13	**0.74**	−0.01	0.18	0.17	0.14
Community1	0.26	**0.61**	−0.10	−0.02	0.12	0.19
Community5	−0.08	**−0.57**	0.06	−0.28	−0.07	0.04
Workload4	−0.09	−0.10	**0.78**	−0.17	−0.04	−0.02
Workload1	−0.08	0.01	**0.76**	−0.01	−0.07	−0.04
Workload3	−0.14	−0.13	**0.70**	−0.21	−0.02	−0.03
Workload5	0.07	0.04	**−0.63**	0.02	0.13	0.27
Workload2	−0.11	0.02	**0.62**	−0.01	0.06	0.10
Workload6	−0.06	0.09	**−0.46**	−0.02	−0.07	0.17
Reward3	−0.18	−0.14	0.11	**−0.78**	−0.10	−0.08
Reward4	−0.18	−0.10	0.17	**−0.73**	−0.05	−0.05
Reward1	0.13	0.19	0.00	**0.72**	0.11	0.23
Reward2	0.19	0.21	−0.03	**0.69**	0.15	0.30
Values1	0.16	0.11	0.02	0.05	**0.78**	0.07
Values3	0.11	0.08	0.04	0.10	**0.77**	0.07
Values4	0.25	0.08	−0.11	0.05	**0.66**	0.11
Values2	0.05	0.07	0.06	0.05	**0.60**	0.03
Values5	−0.22	−0.16	0.19	−0.17	**−0.44**	−0.06
Control3	0.14	0.14	−0.04	0.15	0.12	**0.73**
Control1	0.12	0.12	−0.17	0.16	0.05	**0.72**
Control2	0.30	0.15	−0.11	0.20	0.13	**0.58**

loadings for both items were considerably lower than the loading on the proper factor, the overall structure is acceptable.

In contrast, a five-factor solution provided a worse fit with a structure that collapsed fairness and control into one factor. Both Workload6 and Values5 continued to have loadings less than 0.50. In addition all three control items loaded less than |0.50| on the combined Fairness/Control factor. A four-factor solution had a factor structure that scrambled items from control, reward, fairness, and values with 8 items having loadings less than |0.50| and one item loading at 0.34. To examine whether further differentiation of the scale was appropriate, a seven factor solution defined a new factor from the two negatively worded fairness items (Fair5 and Fair6) with the negatively worded Values5. Values5 continued to have a

relatively low factor loading (0.45) and Workload6 had a loading on Workload of 0.48. The seven-factor solution failed to improve the fit over a six-factor solution because: (1) it did not improve the factor loadings of the two weakest items; and (2) it introduced a factor that was contrary to the objective of combining negatively and positively worded items within most subscales of the AWS.

Confirmatory Factor Analysis

An EQS confirmatory factor analysis considered the factor structure of the AWS. This analysis freed the four most highly correlated errors between items within the subscales: Fairness5/Fairness6, Reward3/Reward4, Reward2/Reward1, Workload5/Workload1. Also, all co-variances among the factors were freed. The six factor solution was found to be an excellent fit to the data ($\chi^2_{(358)} = 5{,}138.98$, CFI = 0.939, RMSEA = 0.042) with all factors loading significantly on the appropriate item. In contrast, a one-factor solution showed a very poor fit ($\chi^2_{(373)} = 25{,}514.14$, CFI = 0.679, RMSEA = 0.094). A two-factor solution (assigning the workload, control, and community items to Factor 1 and the remaining items to Factor 2) also showed a very poor fit ($\chi^2_{(372)} = 23{,}364.14$, CFI = 0.706, RMSEA = 0.090).

The assignment of items to the appropriate subscales in the six-factor solution is displayed in Fig. 1.

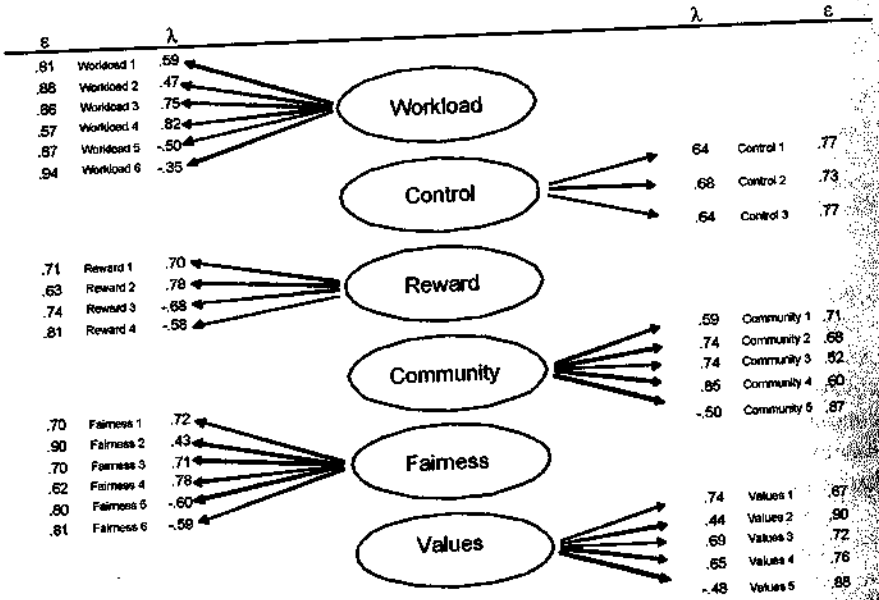

Fig. 1. Confirmatory Factor Analysis.

Table 4. Comparisons of Scores: Areas of Worklife Scale, Normative Sample.

	Pair	Mean Dif.	S.D.	*t*	Sig.
Pair1	Workload – Control	−0.52	1.04	−40.95	0.01
Pair2	Workload – Rewards	−0.23	0.92	−20.75	0.01
Pair3	Workload – Community	−0.63	1.05	−49.44	0.01
Pair4	Workload – Fairness	0.00	1.01	0.20	n.s.
Pair5	Workload – Values	−0.60	1.05	−47.05	0.01
Pair6	Control – Rewards	0.29	0.85	27.68	0.01
Pair7	Control – Community	−0.11	0.95	−9.82	0.01
Pair8	Control – Fairness	0.52	0.89	48.00	0.01
Pair9	Control – Values	−0.08	0.95	−6.92	0.01
Pair10	Rewards – Community	−0.40	0.82	−40.44	0.01
Pair11	Rewards – Fairness	0.23	0.78	24.48	0.01
Pair12	Rewards – Values	−0.37	0.80	−37.56	0.01
Pair13	Community – Fairness	0.63	0.85	61.06	0.01
Pair14	Community – Values	0.03	0.91	3.03	0.01
Pair15	Fairness – Values	−0.60	0.82	−60.65	0.01

Note: $N = 6{,}815$; df = 6,814.

Comparisons Among the Areas of Worklife

Table 4 displays the contrasts among means of the six areas of worklife displayed in Table 2. All contrasts were significantly different except for the contrast of workload with fairness; these two areas of worklife were lower than the other four areas. Community had the highest rating overall ($M = 3.46$) followed closely by values ($M = 3.43$).

Comparison Among Demographic Groups

Gender differences were examined by a series of *t*-tests (see Table 5). Men rated workload, control, and fairness more positively than did women; in contrast,

Table 5. Gender Differences.

Variable	Male	Female	*t*	df	Sig. (2-Tailed)
Exhaustion	2.31	2.62	−7.80	6,289	0.01
Cynicism	1.87	1.79	2.28	6,289	0.05
Efficacy	4.58	4.50	2.99	6,289	0.01
Workload	3.02	2.79	10.11	6,289	0.01
Control	3.45	3.30	6.20	6,289	0.01
Rewards	3.09	3.05	2.31	6,289	0.05
Community	3.49	3.45	1.44	6,289	n.s.
Fairness	2.90	2.79	5.09	6,289	0.01
Values	3.40	3.46	−2.65	6,289	0.01

women scored more positively on values. The differences for community and reward did not attain the $p < 0.01$ level required for repeated t-tests.

Differences among employment status (full time, part time, casual) were examined by a one-way analysis of variance with a Least Squares Difference (LSD) test for post-hoc comparisons for the 6,147 respondents for which this information was available (see Table 6). These groups did not differ on exhaustion or cynicism, but full time employees scored higher on efficacy. On workload, each group differed from the other two, with casual staff least positive about workload and part time staff most positive. On control, each group differed from the other two with full time staff most positive and casual staff least positive. The groups did not differ on reward or community. On fairness and values, full time staff reported less congruence than part time staff.

Contrasts among supervisory level (no supervision, supervisor, management) were examined with a one-way analysis of variance with a LSD test for post-hoc comparisons for the 3,417 respondents for which this information was available (see Table 7). The comparisons indicate that front line supervisors were more exhausted and experienced less efficacy than either management or non-supervisory employees. Non-supervisory employees were the most cynical, while management reported the least cynicism. Management employees were least positive about their workload and most positive about their sense of control. Supervisors experienced the least congruence with rewards and reported the strongest sense of community, while non-supervisory employees reported the least sense of community. Non-supervisory employees also reported the lowest rating of fairness and the least congruence of personal and organizational values. In contrast, management employees reported the strongest congruence in values. These patterns are summarized in the graph in Fig. 2.

Contrasts among age groups were examined with a one-way analysis of variance with a LSD test for post-hoc comparisons for the 3,438 respondents for which this information was available (see Table 8). For all six areas of worklife there was a significant F, but the pattern of differences varied (see Fig. 3). For reward, control, and values, there was a steady increase of positive ratings with age. In contrast, fairness and community started high, dropped in the middle range, and increased for older age groups. A sense of workload congruence steadily decreased with age.

Validity

Evidence for the validity of the items was providing by examining the correspondence of scores on the Areas of Worklife measure with written comments provided by participants in a hospital study (Leiter & Maslach, 2003). The overwhelming proportion of comments from the 1,443 participants who commented contained complaints. A qualitative analysis of the comments assigned comments

Table 6. Employment Status Differences.

Variable	Group	*N*	Mean	S.D.	$F_{(2,6144)}$	Sig.	Group Differed From
Exhaustion	Full time	5,345	2.55	1.49			
	Part time	711	2.46	1.48			
	Casual	91	2.76	1.61			
	Total	6,147	2.54	1.49	2.05	n.s.	
Cynicism	Full time	5,345	1.82	1.35			
	Part time	711	1.80	1.30			
	Casual	91	1.75	1.33			
	Total	6,147	1.82	1.34	0.17	n.s.	
Efficacy	Full time	5,345	4.54	1.01			
	Part time	711	4.38	1.00			Full time
	Casual	91	4.25	1.00			Full time
	Total	6,147	4.52	1.01	11.30	0.01	
Workload	Full time	5,345	2.84	0.82			Part time, casual
	Part time	711	2.94	0.84			Full time, casual
	Casual	91	2.63	0.82			Full time, part time
	Total	6,147	2.85	0.83	8.00	0.01	
Control	Full time	5,345	3.37	0.90			Part time, casual
	Part time	711	3.26	0.84			Full time, casual
	Casual	91	2.86	0.87			Full time, part time
	Total	6,147	3.35	0.89	18.57	0.01	
Rewards	Full time	5,345	3.07	0.56			
	Part time	711	3.07	0.57			
	Casual	91	2.98	0.57			
	Total	6,147	3.06	0.56	1.09	n.s.	
Community	Full time	5,345	3.46	0.84			
	Part time	711	3.39	0.83			
	Casual	91	3.41	0.80			
	Total	6,147	3.45	0.84	1.81	n.s.	
Fairness	Full time	5,345	2.80	0.84			Part time
	Part time	711	2.89	0.77			
	Casual	91	2.74	0.80			
	Total	6,147	2.81	0.83	4.07	0.05	
Values	Full time	5,345	3.42	0.75			Part time
	Part time	711	3.49	0.67			
	Casual	91	3.56	0.68			
	Total	6,147	3.43	0.74	3.98	0.05	

Table 7. Supervisory Level Differences.

Variable	Group	*N*	Mean	S.D.	$F_{(2,2844)}$	Sig.	LSD Test: Group Differed From
Exhaustion	Non-supervisory	803	2.50	1.46			Supervisor
	Supervisor	1,341	2.21	1.35			Both
	Management	703	2.50	1.47			Supervisor
	Total	2,847	2.36	1.42	14.85	0.01	
Cynicism	Non-supervisory	803	2.11	1.41			Both
	Supervisor	1,341	1.81	1.32			Both
	Management	703	1.55	1.25			Both
	Total	2,847	1.83	1.34	33.25	0.01	
Efficacy	Non-supervisory	803	4.66	1.02			Supervisor
	Supervisor	1,341	4.37	1.05			Both
	Management	703	4.62	0.95			Supervisor
	Total	2,847	4.52	1.03	24.94	0.01	
Workload	Non-supervisory	803	3.00	0.81			Management
	Supervisor	1,341	3.06	0.83			Management
	Management	703	2.60	0.85			Both
	Total	2,847	2.93	0.85	76.05	0.01	
Control	Non-supervisory	803	3.45	0.86			Management
	Supervisor	1,341	3.49	0.91			Management
	Management	703	3.71	0.83			Both
	Total	2,847	3.53	0.88	20.97	0.01	
Rewards	Non-supervisory	803	3.17	0.60			Supervisor
	Supervisor	1,341	3.02	0.56			Both
	Management	703	3.14	0.54			Supervisor
	Total	2,847	3.10	0.57	20.63	0.01	
Community	Non-supervisory	803	3.38	0.87			Both
	Supervisor	1,341	3.70	0.79			Both
	Management	703	3.60	0.81			Both
	Total	2,847	3.58	0.83	39.30	0.01	
Fairness	Non-supervisory	803	2.60	0.87			Both
	Supervisor	1,341	3.03	0.75			Non-supervisory
	Management	703	2.99	0.86			Non-supervisory
	Total	2,847	2.90	0.83	78.15	0.01	
Values	Non-supervisory	803	3.15	0.71			Both
	Supervisor	1,341	3.43	0.76			Both
	Management	703	3.68	0.73			Both
	Total	2,847	3.41	0.76	97.49	0.01	

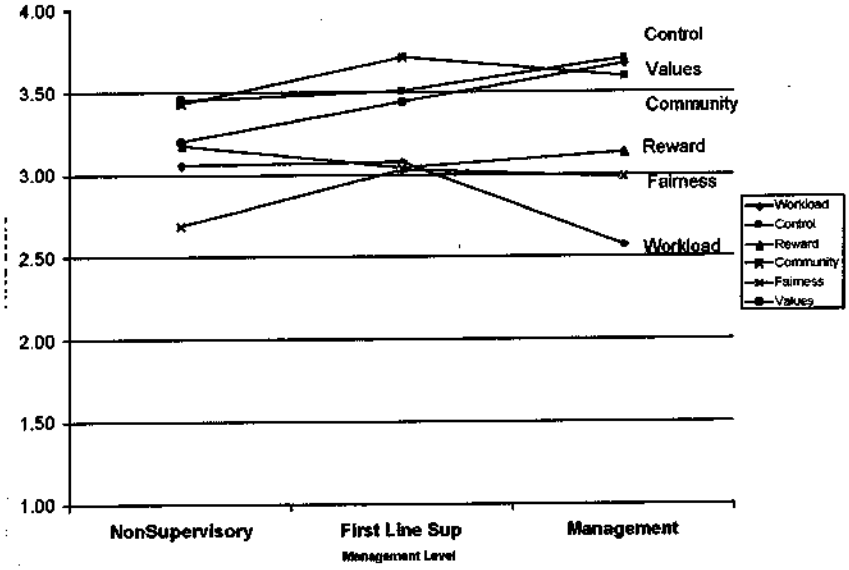

Fig. 2. Areas of Worklife as a Function of Supervisory Position.

om individuals to nodes, many of which were relevant to the six areas of worklife. able 9 displays correlations of scores on the six areas of worklife with a bi- ary indicator of whether an individual wrote a complaint within the various ategories listed in the first column of Table 9. The second column of able 9 indicates the area of worklife most directly relevant to each node. The attern of correlations in Table 9 indicates that complaints were most strongly orrelated with scores on the area of worklife to which it was most directly levant.

on-English Translations of the AWS

confirmatory factor analysis assessed the extent to which the factor struc- ire of the English version of the scale transferred to a Finnish translation Aro Kärnä et al., 2001). The four Finnish samples noted in Table 1 included a nge of occupational groups: health care, university education, postal workers, nd telecommunications. This range of occupations requires a robust measure to pan the diverse occupational issues faced in these occupations in all six areas f worklife. Table 10 displays the factor loadings of the six-factor solution. ll 29 items loaded on the appropriate scale. As with the overall CFA, all orrelations among the factors were freed as were the errors between four airs of items within subscales: Workload1/Workload5, Reward3/Reward4,

Table 8. Age Group Differences.

Variable	Group	*N*	Mean	S.D.	$F_{(2,2844)}$	Sig.
Exhaustion	18–29	488	2.14	1.26	3.43	0.01
	30–39	891	2.28	1.39		
	40–49	1,122	2.35	1.43		
	50–59	843	2.42	1.47		
	60+	94	2.39	1.51		
	Total	3,438	2.32	1.41		
Cynicism	18–29	488	1.93	1.30	0.82	n.s.
	30–39	891	1.87	1.35		
	40–49	1,122	1.82	1.39		
	50–59	843	1.90	1.38		
	60+	94	1.97	1.52		
	Total	3,438	1.87	1.37		
Efficacy	18–29	488	4.38	0.99	4.51	0.01
	30–39	891	4.56	0.99		
	40–49	1,122	4.62	1.01		
	50–59	843	4.54	1.05		
	60+	94	4.53	1.05		
	Total	3,438	4.55	1.02		
Workload	18–29	488	3.28	0.81	19.00	0.01
	30–39	891	3.05	0.82		
	40–49	1,122	2.94	0.82		
	50–59	843	2.94	0.80		
	60+	94	2.87	0.81		
	Total	3,438	3.01	0.82		
Control	18–29	488	3.41	0.87	2.71	0.05
	30–39	891	3.47	0.86		
	40–49	1,122	3.46	0.92		
	50–59	843	3.51	0.91		
	60+	94	3.72	0.79		
	Total	3,438	3.47	0.89		
Rewards	18–29	488	3.08	0.57	5.01	0.01
	30–39	891	3.06	0.57		
	40–49	1,122	3.11	0.58		
	50–59	843	3.11	0.60		
	60+	94	3.32	0.58		
	Total	3,438	3.10	0.58		
Community	18–29	488	3.66	0.86	4.47	0.01
	30–39	891	3.63	0.87		
	40–49	1,122	3.52	0.84		
	50–59	843	3.53	0.82		
	60+	94	3.69	0.79		
	Total	3,438	3.58	0.85		

Table 8. (Continued)

Variable	Group	*N*	Mean	S.D.	$F_{(2,2844)}$	Sig.
Fairness	18–29	488	2.96	0.77	6.81	0.01
	30–39	891	2.91	0.81		
	40–49	1,122	2.79	0.88		
	50–59	843	2.87	0.86		
	60+	94	3.14	0.84		
	Total	3,438	2.87	0.84		
Values	18–29	488	3.28	0.72	4.49	0.01
	30–39	891	3.32	0.74		
	40–49	1,122	3.32	0.80		
	50–59	843	3.40	0.76		
	60+	94	3.56	0.84		
	Total	3,438	3.34	0.77		

Community3/Community4, and Values1/Values2. The overall fit of the model was good ($\chi^2_{(358)} = 897.00$, CFI = 0.914, RMSEA = 0.047).

A confirmatory factor analysis assessed the extent to which the factor structure of the English version of the scale transferred to an Italian translation (Leiter et al., 2002). The Italian hospital samples noted in Table 1 included a range of

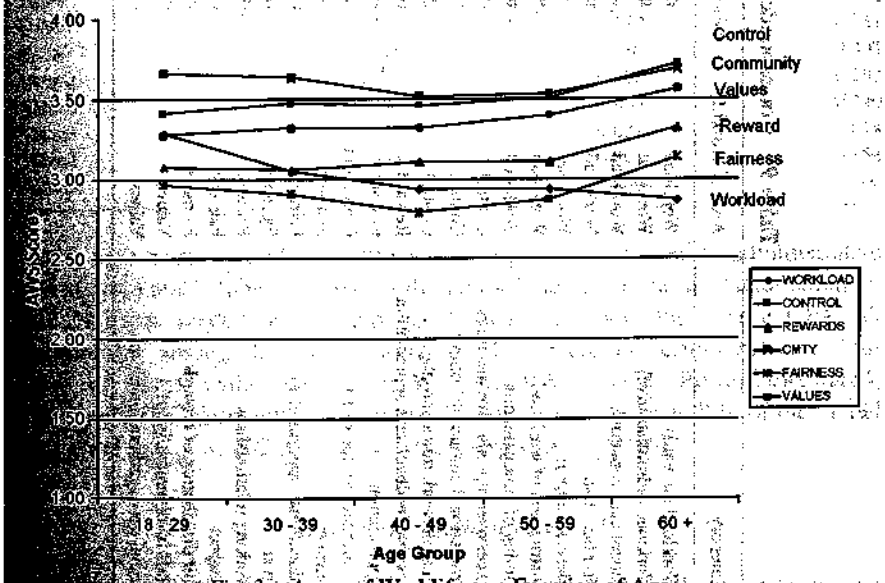

Fig. 3. Areas of Worklife as a Function of Age.

Table 9. Correspondence With Qualitative Analysis.

Category	Area of Worklife	Workload	Control	Rewards	Community	Fairness	Values
Workload on wards	Workload	**−0.14**	0.02	−0.05	0.00	−0.02	0.02
Workload (administrative)	Workload	**−0.13**	−0.06	−0.02	−0.05	−0.03	−0.01
Patient care concerns	Workload	**−0.09**	−0.05	−0.06	−0.07	−0.04	−0.04
Number of staff	Workload	**−0.06**	−0.04	−0.04	−0.03	−0.06	0.01
Clerical support	Workload	**−0.08**	0.07	0.01	0.02	−0.02	0.04
Distribution of workload	Workload	**−0.06**	−0.04	−0.06	−0.06	−0.04	−0.04
Timing of amalgamation	Workload	**−0.10**	0.00	0.00	0.01	−0.03	−0.02
Excessive/unproductive meetings	Control	−0.04	**0.08**	0.06	0.00	0.05	0.05
Professional autonomy/control	Control	−0.06	**−0.08**	−0.05	−0.03	−0.07	0.00
Flexible work times and place	Control	0.02	**−0.06**	−0.01	−0.01	−0.03	0.00
Positive feedback and appreciation	Reward	−0.03	−0.02	**−0.07**	0.01	−0.03	−0.01
Appreciation	Reward	−0.05	−0.08	**−0.11**	−0.03	−0.02	−0.07
Accountability for work	Community	−0.07	−0.02	−0.04	**−0.10**	−0.05	−0.01
Fairness	Fairness	0.00	−0.05	−0.12	−0.07	**−0.14**	−0.07
Educational opportunities	Fairness	−0.04	−0.03	−0.06	0.01	**−0.08**	−0.06
Trust	Fairness	0.01	−0.06	−0.06	−0.04	**−0.11**	0.03
Working relationships	Fairness	−0.07	−0.06	−0.07	−0.05	**−0.10**	−0.03
Respect	Fairness	−0.05	−0.04	−0.11	**−0.07**	**−0.07**	−0.03
Fair distribution of rewards	Fairness	−0.03	−0.07	**−0.08**	−0.06	**−0.08**	−0.02
Staff involvement/input	Values	−0.03	−0.01	−0.03	−0.04	−0.09	**−0.09**
Social get-togethers/functions	Values	−0.02	0.01	0.05	0.03	−0.02	**0.08**

Table 10. CFA: Finnish Translation.

Item	γ	ε	r^2
Workload1	0.520	0.854	0.270
Workload2	0.158	0.987	0.025
Workload3	0.664	0.748	0.440
Workload4	0.850	0.527	0.722
Workload5	−0.493	0.870	0.243
Workload6	−0.362	0.932	0.131
Control1	0.675	0.738	0.455
Control2	0.751	0.661	0.563
Control3	0.539	0.842	0.291
Reward1	0.724	0.690	0.524
Reward2	0.884	0.468	0.781
Reward3	−0.481	0.877	0.231
Reward4	−0.377	0.926	0.142
Community1	0.478	0.879	0.228
Community2	0.750	0.661	0.563
Community3	0.689	0.725	0.474
Community4	0.619	0.785	0.384
Community5	−0.437	0.899	0.191
Fair1	0.688	0.726	0.473
Fair2	−0.096	0.995	0.009
Fair3	0.694	0.720	0.482
Fair4	0.736	0.677	0.542
Fair5	−0.575	0.818	0.331
Fair6	−0.626	0.780	0.391
Value1	0.712	0.702	0.507
Value2	0.499	0.866	0.249
Value3	0.783	0.622	0.614
Value4	0.598	0.801	0.358
Value5	−0.548	0.836	0.300

health care workers, including direct service providers as well as administrative and support staff. Table 11 displays the factor loadings of the six-factor solution. All 29 items loaded on the appropriate scale. As with the overall CFA, all correlations among the factors were freed as were the errors between four pairs of items within subscales: Workload3/Workload4, Reward3/Reward4, Community1/Community2, and Fairness5/Fairness6. The overall fit of the model was good ($\chi^2_{(358)} = 802.37$, CFI = 0.921, RMSEA = 0.046).

Tests of the Mediation Model

With the establishment of the AWS, we have met the first challenge of devising a measure of the organizational conditions variable in the basic mediation model of

Table 11. CFA: Italian Translation.

Item	γ	ε	r^2
Workload1	0.705	0.709	0.498
Workload2	0.484	0.875	0.234
Workload3	0.624	0.782	0.389
Workload4	0.630	0.776	0.397
Workload5	−0.582	0.814	0.338
Workload6	−0.172	0.985	0.030
Control1	0.423	0.906	0.179
Control2	0.707	0.707	0.500
Control3	0.621	0.784	0.385
Reward1	0.801	0.599	0.641
Reward2	0.840	0.543	0.705
Reward3	−0.590	0.808	0.348
Reward4	−0.531	0.847	0.282
Community1	0.553	0.833	0.306
Community2	0.783	0.622	0.613
Community3	0.895	0.446	0.801
Community4	0.778	0.629	0.605
Community5	−0.463	0.886	0.215
Fair1	0.655	0.755	0.429
Fair2	0.642	0.767	0.412
Fair3	0.679	0.734	0.462
Fair4	0.689	0.725	0.474
Fair5	−0.511	0.859	0.261
Fair6	−0.547	0.837	0.300
Value1	0.660	0.751	0.436
Value2	0.057	0.998	0.003
Value3	0.573	0.819	0.329
Value4	0.744	0.669	0.553
Value5	−0.484	0.875	0.234

burnout. However, to test the model across multiple samples, we faced a second measurement challenge. We needed to identify a generic work-related outcome that would be relevant and significant for all respondents. We decided to measure employees' evaluation of the general change within the organization – whether they saw things getting better or worse within the workplace. A positive perception of change is a central outcome in post-industrialized organizations that emphasize quality of service and must continually adapt to volatile environments.

Organizational change is best viewed as a continuous process shaped by strategic decisions, in contrast with a model of rigidity disrupted on occasion by change agents (Weick & Quinn, 1999). The relevant question from the perspective of continuous change is the extent to which employees perceive the organization

as changing for the better or worse, not whether they perceive any change at all. Especially important to employees' capacity to function in a productive and fulfilling fashion are high performance management practices that pertain to job security, decision making, training, hiring, compensation, communication, and reduced status distinctions (Pfeffer, 1998). Employees' evaluation of the direction of continuous change in these practices is an informative indicator of their overall relationship with their work, and, as such, a central outcome measure.

Hypotheses

The basic hypothesis in our mediation model is that the greater the misfit between the person and the job in the six areas of worklife, the greater the likelihood of burnout; conversely, the greater the fit or match, the greater the likelihood of engagement with work. This would suggest a simple additive model, in which mismatches in each of the six areas would contribute separately to greater burnout. However, the research literature reviewed earlier suggests the possibility of more complex interrelationships between the six areas.

Because control is so central to employees' ability to influence the people and processes that determine the quality of worklife, we propose that it serves as the starting point in our mediation model and will influence the extent to which people can attain a match in the other areas, especially workload, reward, fairness, and community. The area of values plays an integrating role in the model, reflecting the overall consistency in the other areas of worklife. As such, it mediates the relationship of the other areas with the psychological experience of burnout or engagement. A match in values indicates that the organization's central values are consistent with those of the employee. In a values match, individuals embrace the organization's mission as a personal mission whose fulfillment is consistent with personal aspirations. In a significant mismatch on values, employees perceive the organization's mission to be incompatible with their own well-being and that of the larger community.

This conceptual analysis leads to the following hypotheses. The first set proposes the replication of the standard pathways among the three dimensions of burnout: exhaustion predicts cynicism, which in turn negatively predicts efficacy. Second, all three dimensions are proposed to predict the outcome of evaluation of changes. The third set of hypotheses concerns the relationship of the six areas of worklife to the three dimensions of burnout. As discussed earlier, workload is predicted to have a direct path to exhaustion. Values is predicted to mediate the relationship of all areas (except workload) with the three dimensions of burnout. Control is predicted to be related to the other areas of workload, reward, fairness,

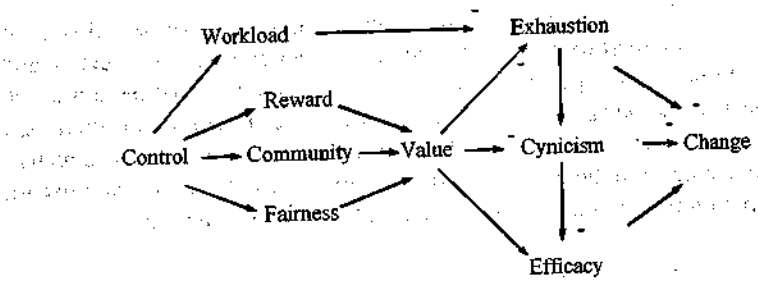

Fig. 4. Hypothesized Model.

and community. The combined set of hypotheses forms the Mediation Model depicted in Fig. 4.

Measures

Three measures assessed the primary elements of the mediation model: the six areas of worklife, the three dimensions of burnout, and people's evaluation of organizational change. The Areas of Worklife Scale (AWS) is the measure we developed to assess the six domains of organizational contributors to burnout; the details of the measure have been described earlier in this chapter.

The Maslach Burnout Inventory-General Scale (MBI-GS; Schaufeli et al., 1996) was used to measure the three dimensions of the burnout-engagement continuum: exhaustion-energy, cynicism-involvement, and inefficacy-efficacy. The items are framed as statements of job-related feelings (e.g. "I feel burned out from my work," "I feel confident that I am effective at getting things done"), and are rated on a 6-point frequency scale (ranging from "never" to "daily"). Burnout is reflected in higher scores on exhaustion and cynicism, and lower scores on efficacy, while the opposite pattern reflects greater engagement. Developed from the original MBI (Maslach & Jackson, 1981), which was designed for human service occupations, the MBI-GS is a 16-item measure that evaluates burnout among people in all occupations. Thus, the MBI-GS was appropriate for all employees within the participating organizations, providing comparative data among units and occupational groups.

Evaluation of change was assessed by 11 items, of which the first three were used in the model testing. This measure has served as an outcome measure in previous research (Leiter & Harvie, 1998). Participants rated items on a five-point Likert-type scale from 1 (much worse) through 3 (no change) to 5 (much better), in response to an introductory sentence, "How do you perceive changes over the

past six months in the following": "services you provide," "your involvement in decisions that affect your work," and "your job security." All three issues – services, decision making, and job security – have been the focus of concern in burnout research (Schaufeli & Enzmann, 1998) and were identified as critical challenges in the participating organizations. Pfeffer (1998) identified job security and decentralized decision making as basic conditions for employees' positive evaluation of organizational change. The timeframe of six months was consistent with that of the MBI-GS, as well as with a reasonable span for employees to consider when evaluating their worksettings. Further, it provided a consistent metric across all the samples. The overall variable of evaluation of change is computed as the average rating across all of the change items.

Model Testing: Cross Sectional

An EQS analysis assessed a cross-sectional model, using data from the same normative sample that was reported earlier for the psychometric research on the AWS. The model comprised sets of pathways representing the three sets of hypotheses in the Mediation Model (Fig. 4). In this analysis only three indicators were used as indicators of each of the latent variables: the three dimensions of burnout, the six areas of worklife, and perception of change. Limiting the number of indicators to three focuses the analysis primarily on the structural equation model, which is the primary focus of this study. This approach is in contrast to one in which scale reliability is considered solely in reference to overall inter-item consistency among the items. Structural equation analysis considers, in addition to high inter-correlations among the items within a latent construct, the consistency in the pattern of each indicator within that latent construct with the indicators within the model's other latent construct (Bentler & Chou, 1987; Hayduk, 1987; Jaccard & Wan, 1996). Whereas each indicator added to the causal model makes a distinct demand on the predictive power of the model, a limit of three indicators for each construct yields the most parsimonious perspective on the structural model. A limit of three indicators also brings a rigor to measurement construction in that it requires that every item maintain a strong level of inter-item correlation with the other two items, and that all three items maintain a consistent pattern relative to the other constructs in the model. Selecting the first three indicators of each scale – rather than searching for the most auspicious items – emphasizes their strong inter-item consistency.

The EQS analysis (maximum likelihood, robust) confirmed a good fit of the model to the data ($\chi^2_{(304)} = 3{,}618.32$; CFI = 0.952, RMSEA = 0.039), with all paths at the 0.05 level of significance on the LM test (see Fig. 5). For this model

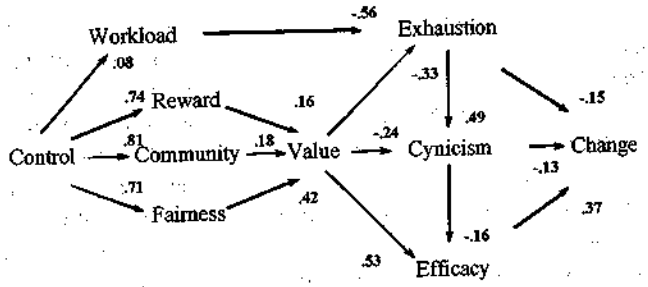

Fig. 5. Causal Model Coefficients: Normative Sample.

correlations of eight errors within scales were freed; such correlations occur frequently with measures as a function of the common response format in the scale (Byrne, 1994).

Model Testing: Longitudinal

A second set of EQS analyses was used to test a longitudinal model, utilizing data from an organization that had adapted our organizational assessment program (Leiter & Maslach, 2000).

Background

Data were collected from the administrative and support staff of a large North American university. The survey was conducted in an effort to systematically assess current organizational strengths and weaknesses from the point of view of the staff; to establish a baseline of data upon which to measure future gains; and to inspire improvement. The survey was executed three times: Time 1 in 2000, Time 2 in 2001, and Time 3 in 2002.

Participation in the study was voluntary, anonymous and confidential. The survey was fully supported by top administration who, in their survey introduction, pledged that survey responses and comments would be considered in future discussions about how to improve the organization and operations. In addition, a Balanced Scorecard Strategic Planning Group, who steered the survey process, stated that they would be held personally accountable for ensuring that this occurred.

During Time 1, responses were received from 1,005 of the possible 1,119 participants (90% response rate) who received the survey. At Time 2, a total of 992 responses of the possible 1,140 participants (87% response rate) were

collected. At Time 3, a total of 812 responses of the potential 1,128 participants (72% response rate) were received. The present study compared data of Time 1 with Time 2 and of Time 2 with Time 3.

Demographics: Time 1 to Time 2

Data from Time 1 and Time 2 were linked through an employee-generated code that permitted the researchers to link the data without knowing the identity of the person from whom the data were generated. Due to procedural changes, some elements of the code were lost between Time 1 and Time 2, resulting in linking only 207 of 800 participants' data. Of the 207 participants for whom data were linked, there were 70 females and 134 males with three not identified. The age ranges were 18–29 (11), 30–39 (32), 40–49 (80), 50–59 (69), and 60 or older (11). The units for time of employment were less than six months (9), six months to 1 year (9), 1–2 years (28), 2–5 years (34), 5–10 years (10), 10–15 years (44), 15–20 years (27), 20–25 years (20), and more than 25 years (24). The positions included front line staff (164), front line supervisors (19), and management (18). They included 184 career employees and 16 casual employees.

Demographics: Time 2 to Time 3

Unfortunately, the two sets of linked data draw from different groups in Time 2 because of challenges in the code for linking data between periods. Although the system of participant-generated codes provided a high degree of confidentiality, it also led to a large number of incomplete links as individuals failed to provide a consistent code across the various surveys. Of the 206 participants for whom data were linked, there were 105 females and 98 males with three not identified. The age ranges were 18–29 (30), 30–39 (41), 40–49 (63), 50–59 (57), and 60 or older (8). The units for time of employment were less than six months (34), six months to 1 year (27), 1–2 years (27), 2–5 years (34), 5–10 years (24), 10–15 years (23), 15–20 years (14), 20–25 years (10), and more than 25 years (7). The positions included front line staff (156), front line supervisors (28), and management (19). They included 178 career employees and 25 casual employees.

Changes in MBI-GS and AWS Over Time

Table 12 displays the correlations of the Time 1 MBI-GS and AWS subscales with their counterparts at Time 2, along with their means and standard deviations. A series of *t*-tests assess the changes over time. All correlations were significant. *T*-tests identified two changes over the assessment interval: fairness increased from Time 1 ($M = 2.64$) to Time 2 ($M = 3.05$) while values increased from Time 1 ($M = 3.21$) to Time 2 ($M = 3.40$).

Table 12. Changes Over Time: Administrative Services: Time 1 to Time 2.

Variable	r	M		S.D.		$t_{(203)}$	Sig.
		Time 1	Time 2	Time 1	Time 2		
Exhaustion	0.47	2.19	2.17	1.33	1.42	0.15	n.s.
Cynicism	0.36	1.75	1.96	1.27	1.33	−2.38	n.s.
Efficacy	0.38	4.88	4.64	0.93	1.06	3.40	n.s.
Workload	0.48	2.97	3.11	0.82	0.78	−1.25	n.s.
Control	0.33	3.40	3.52	0.94	0.90	1.99	n.s.
Rewards	0.17	3.20	3.26	0.52	0.51	1.05	n.s.
Community	0.36	3.32	3.45	0.85	0.88	2.64	n.s.
Fairness	0.36	2.64	3.05	0.87	0.81	2.89	0.01
Values	0.26	3.21	3.40	0.73	0.71	2.45	0.01

Table 13 displays the parallel information for the participants matched from Time 2 to Time 3. Again, all correlations were significant between the measures from one assessment to the other. In this interval, exhaustion increased (Time 2, $M = 2.10$; Time 3, $M = 2.38$) as did cynicism (Time 2, $M = 1.67$; Time 3, $M = 1.98$). Community decreased (Time 2, $M = 3.61$; Time 3, $M = 3.46$), as did fairness (Time 2, $M = 3.17$; Time 3, $M = 3.01$). Table 14 displays the alpha levels for the two samples, indicating that the measures maintained an acceptable level of internal consistency at both assessments.

The organization implemented a large number of interventions over each of the assessment intervals, which were intended to enhance the quality of the work environment. The increases from Time 1 to Time 2 suggest initial success, but the subsequent changes in the negative direction from Time 2 to Time 3 suggest that the organization encountered difficulty in the later stages.

Table 13. Changes Over Time: Administrative Services – Time 2 to Time 3.

Variable	r	M		S.D.		$t_{(203)}$	Sig.
		Time 2	Time 3	Time 2	Time 3		
Exhaustion	0.61	2.10	2.38	1.50	1.54	−2.99	0.01
Cynicism	0.52	1.67	1.98	1.33	1.37	−3.38	0.01
Efficacy	0.49	4.65	4.72	0.95	1.06	−1.03	n.s.
Workload	0.57	2.83	2.88	0.58	0.62	−1.25	n.s.
Control	0.56	3.63	3.52	0.83	0.90	1.99	n.s.
Rewards	0.41	3.06	3.01	0.58	0.66	1.05	n.s.
Community	0.52	3.61	3.46	0.85	0.85	2.64	0.01
Fairness	0.60	3.17	3.01	0.82	0.91	2.89	0.01
Values	0.51	3.51	3.38	0.72	0.77	2.45	n.s.

Table 14. Time 1 to Time 2: Cronbach's Alpha.

Measure	Time 1	Time 2
Workload	0.76	0.73
Control	0.76	0.70
Rewards	0.82	0.80
Community	0.84	0.85
Fairness	0.83	0.80
Values	0.70	0.71

Model Testing: Time 1 to Time 2

The EQS Model testing assessed the Mediation Model against data from this sample in two steps. In the first step, the model included all of the pathways and factor loadings in the Mediation Model with the variation that Time 1 Change was dropped and Time 2 Exhaustion, Cynicism, and Efficacy were added. At this step the only paths from Time 1 to Time 2 were those predicting a steady state: Time 1 Exhaustion to Time 2 Exhaustion, Time 1 Cynicism to Time 2 Cynicism, and Time 1 Efficacy to Time 2 Efficacy (see Fig. 6). The EQS analysis (maximum likelihood, robust) confirmed a good fit of the model to the data ($\chi^2_{(565)} = 887.47$, CFI = 0.920, RMSEA = 0.041), with all paths at the 0.05 level of significance on the Lagrange Multiplier (LM) test.

In the second step, this model was contrasted with one a-priori model (Burnout Lag Model) and one exploratory model (Areas of Worklife Lag Model). The Burnout Lag Model added to the Mediation model two paths: Time 1 Exhaustion to Time 2 Cynicism, and Time 1 Cynicism to Time 2 Efficacy. These paths

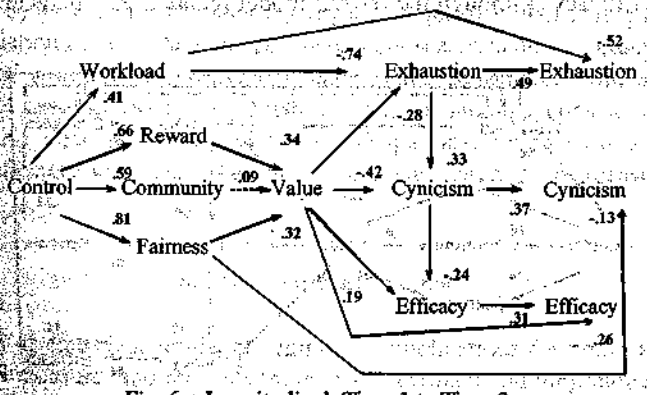

Fig. 6. Longitudinal: Time 1 to Time 2.

parallel the relationships among Time 1 constructs. Although the overall model retained the characteristics of a good fit data ($\chi^2_{(563)} = 885.27$, CFI = 0.920, RMSEA = 0.041), neither of the new paths were significant, and they did not result in a significant improvement of Chi Square ($\text{dif}\chi^2_{(2)} = 2.20$, n.s.).

The Areas of Worklife Lag Model added to the Mediation Model one a-priori path (Time 1 Workload to Time 2 Exhaustion) and two pathways identified on the basis of Modification Indices: Time 1 Fairness to Time 2 Cynicism and Time 1 Values to Time 2 Efficacy. The resulting model maintained a good fit data ($\chi^2_{(562)} = 868.32$, CFI = 0.926, RMSEA = 0.040), with all of the new paths significant, and together resulting in a significant improvement of Chi Square ($\text{dif}\chi^2_{(3)} = 19.15$, $p < 0.01$).

Model Testing: Time 2 to Time 3

With the data from Time 2 to Time 3, the EQS Model testing followed the sequence established for assessing Time 1 to Time 2: it assessed the Mediation Model against data from the organization in two steps. In the first step, the model included the pathways and factor loadings in the Mediation Model with Time 2 exhaustion, cynicism, and efficacy. At this step the only paths from Time 1 to Time 2 were those predicting a steady state: Time 1 Exhaustion to Time 2 Exhaustion, Time 1 Cynicism to Time 2 Cynicism, and Time 1 Efficacy to Time 2 Efficacy (see Fig. 7). The EQS analysis (maximum likelihood, robust) confirmed a good fit of the model to the data ($\chi^2_{(565)} = 984.46$, CFI = 0.919, RMSEA = 0.044), with all paths at the 0.05 level of significance on the LM test.

In the second step, this model was contrasted with the Burnout Lag Model and the Areas of Worklife Lag Model. The Burnout Lag Model added to the Mediation model two paths: Time 1 Exhaustion to Time 2 Cynicism, and Time 1 Cynicism to Time 2 Efficacy. Although the overall model retained the characteristics of a

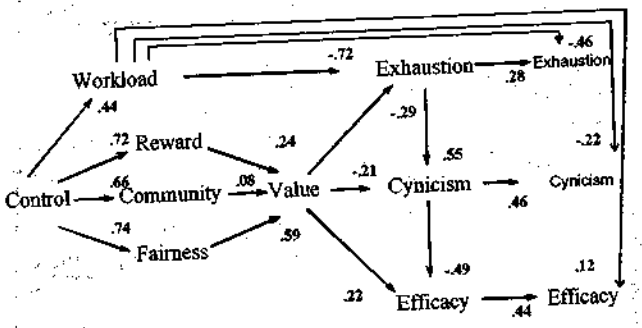

Fig. 7. Longitudinal: Time 2 to Time 3.

good fit data ($\chi^2_{(563)} = 981.18$, CFI = 0.920, RMSEA = 0.044), neither of the new paths were significant, and they did not result in a significant improvement of Chi Square ($\text{dif}\chi^2_{(2)} = 3.28$, n.s.).

Areas of Worklife Lag Model added to the Mediation Model the paths from the previous analysis: Time 1 Workload to Time 2 Exhaustion, Time 1 Fairness to Time 2 Cynicism, and Time 1 Values to Time 2 Efficacy. The resulting model maintained a good fit data ($\chi^2_{(562)} = 978.29$, CFI = 0.920, RMSEA = 0.044), but only the path from workload to exhaustion was significant, and the overall improvement in fit was not significant ($\text{dif}\chi^2_{(3)} = 6.17$, n.s.). An exploratory analysis indicated that a Worklife Lag Model with three paths from Time 1 Workload – to Time 2 Exhaustion, Time 2 Cynicism, and Time 2 Efficacy – provided a good fit ($\chi^2_{(562)} = 969.00$, CFI = 0.920, RMSEA = 0.044) that was a significant increase in fit ($\text{dif}\chi^2_{(2)} = 15.48$, $p < 0.01$).

DISCUSSION

Taken together, all of this research provides considerable support for our mediation model. The experience of burnout or engagement is the mediating link between the organizational context and work-related outcomes. It is not simply that burnout is an important psychological outcome in its own right, but that it is related to people's commitment to their job and their evaluation of organizational change. The clear implication is that the burnout experience should be predictive of other job-related outcomes, such as work behaviors, and this should be the focus of future research.

These analyses provide strong evidence for the utility of the Areas of Worklife Scale (AWS) as a means of assessing organizational life, which is a key factor in the mediation model. The scale produces a consistent factor structure, defining six areas of worklife of specific relevance to the continuum from burnout to engagement as assessed by the MBI-GS. The remarkable consistency of the psychometric data across a variety of occupations, organizational settings, national contexts and languages attests to the robust nature of the measure.

Implications for Research

The pattern of empirical results has important implications for both the validity of the AWS measure, and the tests (both cross-sectional and longitudinal) of our conceptual model.

Properties of the AWS

The factor structure identified in both the principal components analysis and the confirmatory factor analysis supports the six-factor solution including all 29 items. Despite a strong level of correlation among the six subscales, the individual items maintain their distinct status. The two items with loadings just below the ideal level of |0.50| did not show cross loadings on other factors but were clearly associated with the indicated factor. As they both were negatively worded items on their respective factors, it is important to retain them in the overall scale, as they help to avoid a strong unidirectional response set. It is a further confirmation of the factor structure that a good level of fit was established using only three items for each latent variable.

The contrasts among the various subscales confirm that there are distinct normative levels for the various areas of worklife. The only two that did not differ were workload and fairness – the two areas that consistently received the lowest ratings across the various samples. To some extent the 3.00 level of the five-point scale provides a clear demarcation between the range of congruence (from 3.01 to 5.00) and the range of incongruence (1.00–2.99). The normative levels on these scales indicate that across a wide range of work settings, workload and fairness are incongruent for most people. In contrast, control, community, and values are generally congruent for most people, and rewards are at a neutral level. Further research may explore the extent to which these scores reflect fundamental qualities of worklife in post-industrial societies or whether – on a more modest scale – they are qualities of the AWS measure. At this point they indicate an important reference point in assessing the extent to which a work setting is confronting distinct challenges or whether it is contending with the general nature of work.

Differences among the demographic levels provide another reference point. Many of these differences are quite small in absolute terms, becoming evident only in a large sample such as the combined normative sample used in this analysis. Overall, there was a high degree of consistency among the patterns of scores on the AWS and the MBI-GS. However, a gender pattern did emerge, with women reporting a more negative pattern than did men, with higher exhaustion, lower efficacy, and less congruence on workload, control, and fairness. The one element on which women were more positive than men was greater congruence on values. Another pattern emerged with regard to age, with older people reporting a greater congruence in most of the areas of worklife. This increasing congruence may reflect either a greater capacity to shape the workplace with experience or authority, or it may reflect a tendency to accommodate more readily to the qualities of a workplace over time. The one exception was workload, which showed a declining congruence for older workers. This pattern may reflect

increasing demands for people with greater experience or authority, or a more constrained capacity of aging employees to manage work demands.

In regard to employment status, the higher scores of full time staff on efficacy and on control are consistent with their increased time and commitment to their positions. The pattern of scores for casual staff is consistent with their somewhat marginal status with the organizations: they have a minimal authority and are generally called upon when workload is heavy. The more positive score on workload for part time employees is consistent with the lower demands associated with a reduced time commitment to the organizations. The more negative score on fairness for full time employees relative to part time employees is surprising and could suggest systematic problems with organizational justice or resource allocations associated with the factors that cause fairness to have a lower normative level of congruence than the other areas.

Contrasts among supervisory level suggest widespread difficulties for front line supervisory positions, as indicated by higher scores on exhaustion and lower scores on efficacy. Supervisors reported the least congruence on rewards, despite a relatively strong sense of community, suggesting that there may be a benefit in reconsidering reward structures for front line supervisors. The pattern for managers suggests that their positional gains in control come at the price of increased work demands beyond their expectations for the position. Their relatively high scores on values are consistent with their greater capacity to shape the organizational agenda and the symbolic role of management in representing the organizational mission. Overall, these patterns indicate that people develop distinct perspectives on the six areas of worklife, which are related to their own positions in the organization and their personal characteristics.

Tests of the Mediation Model

The cross sectional analyses confirmed the central concepts of the mediation model. All three components of burnout mediated the relationship between the work setting (as assessed by the AWS) and the work outcome (evaluation of change). A striking aspect of the findings is the complex way in which the six areas of worklife predicted burnout. Workload and control each played critical roles (thus replicating conceptually the Demand-Control model) but were not sufficient. Reward, community, and fairness added further power to predict values, which in turn was the critical predictor of the three dimensions of burnout. The results revealed that this was not a simple additive model, but a more complicated mediation model in its own right. The strong pathways from control to reward, community, and fairness acknowledge the role of autonomy and participative decision making to empower people to shape other key areas of their work experience. The subsequent pathways from these three areas to values are

consistent with people integrating their job experiences on various fronts into a coherent perspective on their working life.

The results of the longitudinal analysis provide additional support for the importance of considering areas of worklife and raise important points for consideration in further research. First, the interrelationships among the three dimensions of burnout were confirmed only within a single time period, and did not show a lagged pattern across time. For example, the well-established path from exhaustion to cynicism was seen at Time 1 and again at Times 2 and 3, but exhaustion at one time period did not predict cynicism at a later point. These findings suggest that the processes through which one component of burnout becomes aligned with the others occur relatively quickly. These relationships are already in place at the initial assessment and maintain a steady pattern of interrelationships through the subsequent assessment, as indicated by the horizontal paths from each burnout component to its subsequent state in Figs 6 and 7.

Second, and even more intriguing, are the longitudinal results that show that some of the worklife areas (workload, fairness, and values) at Time 1 are predictive of burnout at Time 2. In a partial longitudinal replication, workload at Time 2 predicted burnout at Time 3. These lagged relationships clearly suggest that the connection between organizational factors and burnout has a longer time frame. Workload evidenced a consistent relationship with exhaustion across the one-year interval for both steps of the analysis. This path is in addition to that within Time 1 from workload to exhaustion and the subsequent step from Time 1 exhaustion to Time 2 exhaustion. This pattern implies that workload that is incongruent with a worker's expectations may have both long term and short term implications. The other lagged relationships of areas of worklife with burnout suggest that these areas may operate on a similar time frame. The path from Time 1 fairness to Time 2 cynicism and from Time 1 values to Time 2 efficacy supplement existing paths within Time 1. The failure to replicate these lagged paths in the subsequent interval may indicate that these relationships are specific to transitory conditions within the work setting. In contrast, the confirmation of the predicted path from workload to exhaustion provides strong evidence for its enduring nature.

Further progress in unraveling the key elements underlying burnout requires a well thought out concept of organizational life. The AWS strikes a balance between becoming lost in the myriad elements of the organizational context on the one hand, and limiting the focus to one or two simple elements on the other. Initial research suggests the presence of consistent patterns of relationship among the six areas of worklife, but there are also indications of situation-specific patterns, as demonstrated by changes over the two steps of the longitudinal analysis. Greater clarification of the unique and enduring patterns among aspects of the

organizational environment will provide a firmer basis for developing theory and for implementing interventions to enhance the quality of worklife.

Implications for Intervention

By positing a complex framework through which people make sense of their work settings, the mediation model constitutes a major advance over simple listings of organizational characteristics. The set of organizational correlates of burnout has grown so diverse that its further adumbration does not appear constructive in itself. The mediation model identifies six distinct dimensions of work settings that encompass a large scope of burnout's organizational correlates while remaining sufficiently focused to be manageable. The structure of their relationships in the mediation model – including the pivotal role of control, the relative independence of workload, and the pervasive influence of value congruence – define a psychological environment in which people perceive and experience the world of work. Underlying the model and the measures is the concept of people's fit or match with their job environment. Rather than proposing an ideal job or the ideal employee, the model accepts a wide range of functional job environments and a wide range of personal aspirations and inclinations shaping the way people work. The focus of both our basic and applied research is examining the interactions of these two dynamic and complex entities.

The mediation model opens avenues for interventions that will enhance the quality of people's job experience. It defines leverage points for changing the key elements of burnout: the level of energy people bring to their jobs, the extent to which they are involved in their work, and their sense of efficacy in their work. These are deep-seated qualities of personal experience, not directly available to the influence of management or an immediate supervisor. It is difficult to conceive of how a manager would directly bestow additional energy, involvement, or efficacy upon an employee. The mediation model points towards the proper domain for organizational interventions: workplace policies and practices that will shape the six key areas of worklife. These areas will affect the cognitive and emotional experiences of employees (energy, involvement, efficacy), which in turn will affect their attitudes and behavior at work. The challenge for organizational interventions is being able to identify which areas need change, and this is where the AWS becomes an especially useful diagnostic measure.

The AWS is a key element in our Organizational Checkup Survey (Leiter & Maslach, 2000), which has proved to be a powerful tool for mobilizing organizational self-reflection and change. The process of the organizational checkup is designed to inspire the full participation of all the employees, as indicated by

the strikingly high response rates in the organizations in which we have worked (e.g. Leiter & Maslach, 2003). The main intent of the survey is to generate a comprehensive profile of the organization's workforce, which can be used to inform decisions about intervention. However, the participative nature of the checkup process can be viewed as an intervention in itself, which engages all employees in an organizational dialogue and prepares them to get involved in future change.

The results of our work with several organizations (which are included in our normative sample for the AWS) propose two basic points of contact for intervention: workload and values. An organization can enhance the energy levels of employees by managing workload to be compatible with their expectations and capacity. This apparently simple advice holds huge implications for organizations operating in a fiercely competitive global market, or for public services attempting to address growing demand with shrinking resources. The challenge of managing workload is enormous. But the persistent relationship of unmanageable workload with exhaustion, of exhaustion with cynicism, and of both with performance problems, underscores the necessity to address this area of job-person mismatch.

To address the second point of contact, values, organizations face the challenge of building a shared vision of the organization. Although most organizations in the post-industrial world have completed the initial steps of articulating a mission statement and core objectives, few have succeeded in making that vision permeate their policies and practices to the point that they affect everyone from senior management to front line employees. It has been argued that the capacity to imbue the organization with the core mission is a critical factor separating highly effective companies from those with more modest levels of accomplishment (Pfeffer & Sutton, 2000).

The mediation model suggests that a fundamental issue for managing employees' experiences is their capacity to shape their worklife and to participate in decisions. The position of control at the foundation of the model implies that significant gains or losses in autonomy or authority can have widespread implications for employees' views of their job, their position on the continuum from burnout to engagement, and their performance or attitudes about their work.

In addition to the overall themes of the model, the AWS provides the capacity to assess specific work settings in regard to the six areas of worklife. Although control or workload are key issues in general, a specific work setting may have greater difficulties with their procedures for recognizing excellent performance (reward), their internal processes for promotion (fairness), or the level of conflict within the workplace (community). The AWS not only directs the organization's efforts to where they may have the greatest impact, it also provides a metric to

assess the extent to which interventions had their intended impact on specific qualities of the work environment.

The model and the measure make a major contribution to making burnout a problem that can be solved in better ways than having employees either endure the chronic stress or quit their jobs. For the individual employees, the organizations for which they work, and the clients whom they serve, the preferred solution is to build a work environment that supports the ideals to which people wish to devote their efforts. This is a formidable challenge, but one that becomes more possible with the development of effective measures and a conceptual framework to guide intervention.

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