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CONSISTENCY OF THE BURNOUT CONSTRUCT ACROSS OCCUPATIONS

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This study assessed the extent to which a recently developed measure of burnout extended the concept of burnout as developed among human service providers to people in other occupations. The study replicated a factor structure derived from a study of aircraft maintenance workers, computer programmers, and administrators with staff in various occupations across two health care settings: a tertiary care hospital ($N = 3,312$) and a residential mental health facility ($N = 417$). Within the larger setting the analysis replicated the factor structure with four occupational groups: clerical/maintenance workers, technical personnel, nurses, and managers. The study found support for the validity of the scale through its consistency with the issues that participants raised in an open-ended questionnaire. Conceptual issues in burnout theory and suggestions for further research are presented.

KEY WORDS. burnout, causal modeling, confirmatory factor analysis, stress, measurement.

The Maslach Burnout Inventory (MBI) was developed to measure burnout as an occupational issue for people providing human services (Maslach & Jackson, 1986; Maslach, Jackson, & Leiter, 1996). Almost from the original release of the MBI, researchers used the scale, modified or unmodified, with occupational groups other than public human service providers, including civil servants (Golembiewski & Munzenrider, 1988), military (Leiter, Clark, & Durup, 1994), computer programmers (Lee & Ashforth, 1993), police officers (Burke, 1987), managers (Lee & Ashforth, 1993), and entrepreneurs (Gryskiewicz & Buttner, 1992). These researchers found that not only did these groups' scores on the MBI subscales differ from norms established with human service providers, but that the factor structure for the MBI was not maintained across other occupational groups. In particular, the depersonalization and emotional exhaustion subscales tended to collapse into one factor when groups other than human service providers completed the MBI. The MBI, however, has a stable factor structure within human service occupations across cultures. The scale's factor structure was maintained with a clear differentiation between depersonalization and emotional exhaustion when translated versions of the MBI were administered to European human service workers

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(Enzmann, Schaufeli, & Girault, 1995; Richardsen, Burke, & Leiter, 1992; Schaufeli & Janczur, 1992).

The MBI's strong and explicit focus on emotional demands and rewards arising from personal relationships with service recipients increases the scale's power to assess human service occupations. Its specificity to the human service work context differentiates burnout from the global construct of depression (Leiter & Durup, 1994). Each of the three MBI subscales shares this emphasis on service relationships. The emotional exhaustion scale measures the depletion of emotional energy, as distinct from physical exhaustion or mental fatigue (Enzmann, 1994); emotional exhaustion is most clearly a signal of distress in emotionally demanding work. Depersonalization is a problem in careers that value and mandate personal sensitivity to service recipients. Personal sensitivity is an essential quality of therapeutic relationships, and it is mandated by the ethical codes of human service professions. In other occupations personal sensitivity may be a minor asset, irrelevant, or even a hindrance to effective work. Personal accomplishment emphasizes effectiveness and success in having a beneficial impact on people. This focus is central for human service providers, but misses major areas of activity for other occupational groups.

Attempts to extend the MBI to other occupational groups indicate that even when the service relationship emphasis is inappropriate, the scale captures a quality of a person's relationship with work that is not assessed adequately by existing measures of occupational stress and accomplishment. In the current context, a wide range of occupations other than those providing human services permit or even require a strong personal engagement in work. Such involvement is especially evident in careers with opportunities for autonomy or self-management (Manz, 1986; Manz & Sims, 1984), and which are characterized by meaningfulness, performance feedback, and intrinsic satisfaction (Hackman, 1986). Research with groups other than human service providers has used the MBI to assess personal engagement in the demands and rewards of work. Using the MBI unchanged with other occupational groups runs the risk of missing important aspects of work outside of service provision (Maslach & Schaufeli, 1993). Modifying the MBI relinquishes the strong basis for the validity and reliability for the scale (Maslach & Jackson, 1986).

The apparent need for the scale and the unsatisfactory nature of compromises using the MBI prompted the development of the Maslach Burnout Inventory — General Survey (MBI—GS; Schaufeli, Leiter, Maslach, & Jackson, 1996). The goal of this project was to encompass occupations that included working with people closely (the human service providers that were the focus of the MBI), those that included casual contact with people, and occupations without direct personal contact with service recipients. The research plan proceeded from a multicultural base within the context of industrialized nations with the scale administered to samples in Canada, Holland, and Finland in their native languages (Maslach et al., 1996; Schaufeli, Leiter, & Kalimo, 1995). (The Canadian sample received an English version.)

The MBI—GS has three subscales that parallel the MBI: exhaustion, cynicism, and professional efficacy. The exhaustion items are generic, without the MBI's emphasis on emotions and without direct reference to service recipients. The subscale that differs to the greatest extent from the original MBI is the introduction of cynicism in place of depersonalization. Depersonalization is the quality of

burnout that was most exclusively associated with human service work. Each of the five MBI items refers directly to the service relationship. They describe a social perception of service recipients that is in direct contrast to effective therapeutic relationships and the ethical principles of service professions. In the original model behind the MBI (Leiter & Maslach, 1988; Maslach & Jackson, 1986), depersonalization was seen as a dysfunctional mode of coping with the emotional demands of service provision by distancing oneself emotionally from recipients.

The new cynicism items reflect indifference or a distant attitude towards work, e.g., "I am indifferent towards my work; I doubt the significance of my work." The items refer to the work itself. They do not include or exclude references to personal relationships at work. Further, the cynicism items are not as directly at odds with ethical codes of occupations. The extreme nature of the MBI's depersonalization items resulted in distributions that were skewed strongly towards the low frequency end of the scale. While this skew may have reflected accurately a low frequency of depersonalization among human service providers, it may well have been influenced by social desirability: Respondents would be disinclined to acknowledge such unacceptable statements in writing. In either case, the strong skew of the depersonalization scale reduced its capacity as a predictor variable in statistical analyses (Leiter, 1988, 1991, 1993). By encompassing items expressing disengagement from work and a lack of enthusiasm, the cynicism scale is likely to have a more balanced distribution.

Although cynicism is the MBI—GS subscale that is most distinct from its counterpart in the MBI, it serves the same function without a model of burnout. It represents a distancing from work in response to exhausting, discouraging aspects of work. In human service burnout the focus of distancing is from the emotional demands of service provision. In general burnout this subscale represents a distancing from engagement in the work itself. This is an important distinction that justifies fully the coexistance of the MBI and the MBI—GS. Each assesses the underlying dynamics of exhaustion, distancing, and efficacy doubts that comprise the syndrome of burnout. The MBI focuses upon personal relationships that constitute the central concern of human service providers. Personal relationships are not the only aspect of work that engages people, however. Many jobs in management, technical, and creative occupations require intellectual and emotional engagement with the work. The active disengagement from work reflected in this subscale goes beyond a neutral aloofness from doing one's work to encompass a quality of cynical rejection. This quality maintains the parallel between the two measures of burnout.

The three-factor structure of the MBI—GS requires that cynicism differs qualitatively from exhaustion. That is, if indifference and a lack of enthusiasm were directs indicators of exhaustion, the items would combine as one factor. In parallel with the role of depersonalization in the MBI, cynicism represents dysfunctional coping within the MBI—GS. Employees develop indifference and cynicism about their work in order to gain distance from its exhausting demands. This reaction is expected to be dysfunctional in that cynicism reduces the energy available for performing work and for developing creative solutions to the problems work presents. Cynicism also diminishes the job's potential for building professional efficacy. Therefore, cynicism is expected to be positively correlated with exhaustion and negatively correlated with profession efficacy.

The professional efficacy construct is similar in many ways to personal accomplishment as measured by the MBI. However, in addition to a broader focus, encompassing both social and nonsocial aspects of occupational accomplishments, the scale focuses more directly than the MBI on efficacy expectations (Bandura, 1977): e.g., "At my work, I am confident that I am effective at getting things done." While it includes satisfaction with past and present accomplishments (e. g., "I have accomplished many worthwhile things in this job"), it explicitly assesses an individual's expectations of continued effectiveness at work.

The exhaustion items include references to both emotional and physical fatigue, but do not make direct reference to people as the source of those feelings. Some of the changes from the MBI are quite direct: "Working with people all day is really a strain for me," is changed to "Working all day is really a strain for me." All of the items in the exhaustion subscale are taken from the MBI in modified or unmodified form.

Two studies tested the MBI—GS with diverse populations: staff members of a tertiary care medical hospital, and staff members of a residential mental health facility. The analysis assessed the appropriateness with these populations of a factor structure developed in a study of aircraft maintenance workers at a Canadian military base, computer programmers in Finland, and administrators in Holland (Schaufeli et al, 1996). The analysis assessed the extent to which the MBI—GS remains pertinent to human service providers while encompassing people in other occupations. The two health care settings included direct service providers as well as clinical support staff, maintenance workers, clerical workers, and management personnel. The study provided an opportunity to assess the robustness of the factor structure across settings and occupational groups. It was expected that the studies would confirm a three-factor structure for the MBI—GS across all settings and disciplinary groups. It was further expected that there would be differences among the groups in regard to their scores on the three factors.

METHOD

Participants Sample 1: Tertiary Care Medical Hospital

Participants in this study were 3,312 staff members of an 800-bed tertiary care hospital in central Canada. Data were collected as part of an employee survey requested by hospital management to assess the impact of changes to the hospital's mandate in response to anticipated decreases in government funding and developments in provincial health care policy. The total sample included 2,596 females, 482 males, and 243 who did not specify gender. Participants had worked at the hospital for varying lengths of time: 0 to 6 months (66); 7 to 12 months (91); 1 to 2 years (150); 2 to 5 years (587); 6 to 10 years (996); 10 to 15 years (514); 16 to 20 years (277); and more than 20 years (569).

In addition to the overall perspective, the analysis focused on four occupational groups within the hospital. Two groups, Clerical/Maintenance ($n = 609$) and Management ($n = 310$), provided indirect support and administrative services to the hospital, with only incidental contact with patients. A third group, Technologists, Technicians, and Therapists ($n = 231$), provided clinical support services with varying amounts of direct contact with service recipients. Much of the

technical work occurred in laboratories without patient contact. The fourth group, Nursing (n = 1,257), did not include nurses with primarily administrative responsibilities. Instead, members of this group provided direct care to patients. This group comprises the population of direct service providers that was the focus of the MBI.

Participants Sample 2: Residential & Outpatient Psychiatric Center

Participants for this study were 417 staff members of a psychiatric facility that provided a full range of mental health services to the local urban community, and provided specialized mental health services on a provincial level. Data were collected as part of an employee survey requested by hospital management to assess the impact of changes in the hospital's mandate in response to anticipated decreases in government funding and developments in provincial health care policy. The total sample included 265 females, 119 males, and 33 who did not specify gender. Participants had worked at the hospital for varying lengths of time: 0 to 6 months (17); 7 to 12 months (7); 1 to 2 years (22); 2 to 5 years (73); 6 to 10 years (178); 10 to 15 years (33); 16 to 20 years (49); and more than 20 years (33).

Survey

As part of an extensive survey of employee perceptions of changes in the workplace, participants completed a 24-item English language version of the Maslach Burnout Inventory — General Survey (MBI—GS; Schaufeli et al., 1996). The analysis reported here uses 16 items in light of recommendations from that analysis.

Participants were invited to write comments on anything pertaining to their work at the hospital. Of the 3,312 participants, 853 wrote comments ranging from one sentence to 14 pages in length.

Procedure

Questionnaires including the MBI—GS (Schaufeli et al., 1966) were distributed to all staff members of each setting by hospital personnel. Completed surveys were returned to the researchers by 3,312 of the 4,000 staff members (82.5%) at the tertiary care hospital and by 417 of the 800 staff members at the psychiatric facility (52%). The high response rate at the tertiary care hospital was due in part to the salience of organizational change for hospital employees, optimistic expectations regarding a new management team, and a well organized effort by the hospital-based survey committee to enhance participation.

The written comments were matched to the quantitative data during processing. The text was typed into a word processor for processing by a qualitative analysis program, NUDIST (Replee Pty, 1994). One aspect of this analysis was the development of an index, categorizing all or part of each comment. An indexed version of the comments was returned to the hospital. After indexing was complete, the data file was supplemented by information from the index indicating the categories discussed by each participant making comments.

RESULTS

The factor structure of the MBI—GS was tested with a causal model analysis using LISREL 7 (Jöreskog & Sörbom, 1989) using the maximum likelihood method to examine the covariance matrices of the items. The analysis assessed the factor structure with the incremental goodness of fit index, Delta2 (Bollen, 1989) and the relative noncentrality index (RNI) (McDonald & Marsh, 1990) to assess the quality of the models. These indices are independent of sample size and are appropriate to causal models that have both structural and confirmatory factor analysis components (Gerbing & Anderson, 1993). These indices are computed in relation to a Null Model that specifies no relationships among the measures. The LISREL model freed the main diagonal of the theta epsilon matrix of measurement errors and 4 of the 120 off-diagonal elements that were highly correlated, as is often the case among items with identical rating scales (Byrne, 1989). They were freed in order to provide a clearer assessment of differences in overall fit among competing models.

In order to reduce change capitalization the tertiary care sample was randomly split. The initial factor structure was tested on a sample of 830 subjects from the full sample of the tertiary care hospital. This test sample included the full range of disciplines employed at the Hospital. The factor structure displayed in Figure 1 was confirmed. The confirmatory factor analysis found that all items loaded well beyond the $t = 1.96$ criterion on the predicted factors. The Proposed Model with no cross loadings was found to provide an adequate fit to the data, as indicated by the Goodness of Fit analysis in Table 1. This analysis confirmed that the Proposed Model with a Delta2 of .929 and a RNI of .929 was a substantial improvement over the One-Factor Model with a Delta2 of .866 and an RNI of .866. The Proposed

Table 1 *Model Comparisons Tertiary Care Hospital*

Random Sample 1 ($n = 830$)	DF	CHI	GFI	Delta 2	RNI	RMR	χ^2 Dif
Proposed Model	100	557	925	.929	929	090	405
Uncorrelated Model	102	962	881	866	.866	193	
Two-factor Model	100	797	.882	892	.891	108	
One-factor Model	105	4004	558	394	391	174	
Null Model	136	6538	374			318	
Random Sample 2 ($n = 830$)	DF	CHI	GFI	Delta 2	RNI	RMR	χ^2 Dif
Proposed Model	100	553	.925	.927	926	086	403
Uncorrelated Model	102	956	.884	862	.861	192	
Two-factor Model	100	696	.900	.907	907	095	
One-factor Model	105	2558	665	604	602	126	
Null Model	136	6298	338			311	

Note CHI = chi square, GFI = goodness of fit index Delta2 = Delta2 fit index RNI = relative noncentrality index, RMR = Root mean square residual, χ^2 Dif = chi square difference value

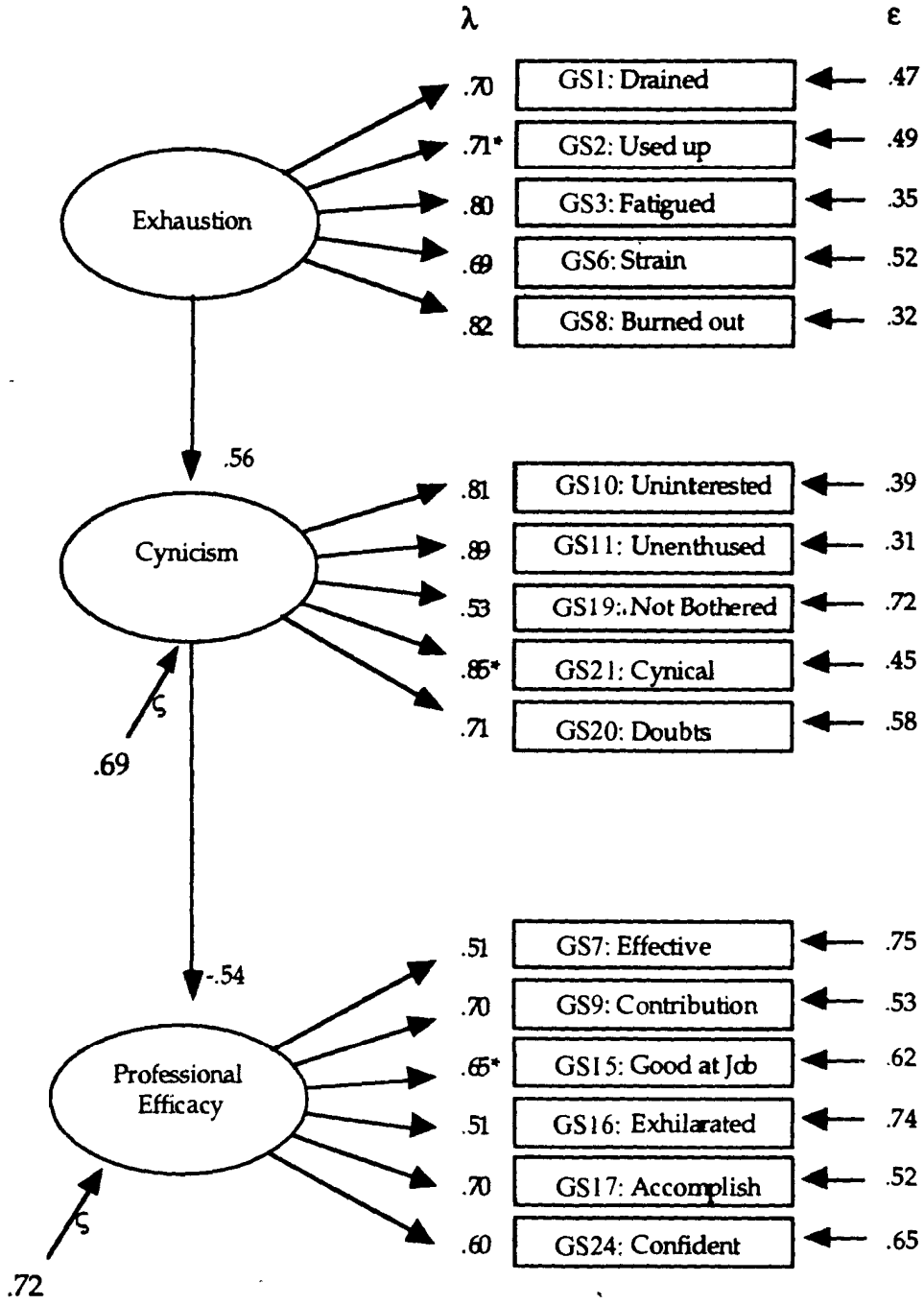

Figure 1. Causal Model Maslach Burnout Inventory — General Survey (MBI—GS)

Model included relationships among the three factors: a path from exhaustion to cynicism and a path from cynicism to professional efficacy. Whereas an Uncorrelated Factors Model and the Proposed Model are nested in relation to one another, the chi-square difference test can directly test the improvement in fit provided by the three paths among the factors (Bentler & Bonnet, 1980). As indicated in Table 1 the improvement in fit provided by the addition of these paths among the factors is substantial (χ^2(dif) = 405 2 df, $p < .0001$). Further, a Two-Factor Model, collapsing exhaustion and cynicism into a single factor with a path to professional efficacy, provided a less satisfactory fit. An analysis of a second random sample of 830 participants replicated all aspects of the model testing with the first random sample, confirming the Proposed Model (see Table 1) and providing cross-validation in an independent sample.

An analysis of the full 417 member sample of the psychiatric facility confirmed the same factor structure (see Table 2). The improvements in Delta2 and RNI for the Proposed Model were similar to that found in the tertiary care hospital analysis. A series of t tests established that the staff members at the tertiary care hospital scored significantly higher on exhaustion ($t_{(3636)} = 2.57$, $p < .01$) and professional efficacy ($t_{(3636)} = 4.17$, $p < .0001$), and significantly lower on cynicism ($t_{(3636)} = -2.83$, $p < .01$). Table 3 displays the means, standard deviations, and Cronbach alpha coefficients of internal consistency for the two settings.

To determine the extent to which the MBI—GS pertained to a variety of disciplines, including service providers and people performing other functions in the tertiary care hospital, the confirmatory factor analysis was repeated with each of four groups: Group 1 — clerical and maintenance workers; Group 2 — technologists, technicians, and therapists; Group 3 — nurses; Group 4 — managers. These four groups included 2,691 of the 3,312 participants. This analysis contrasted the Proposed Model with the Uncorrelated Model, the Two-Factor Model, and the One-Factor. Model in relation to a Null Model. This analysis was not conducted with the psychiatric facility because of the small size of the subgroups. Table 4 displays the results of these analyses. The Proposed Model fit the data for each of these four groups equally well. Note that there is little variation in the Delta2 and RNI values for the various sectors, consistent with the indices' insensitivity to changes in sample size and consistency of the construct across the occupational groups.

Table 2 *Model Comparisons: Psychiatric Facility* ($n = 417$)

	DF	CHI	GFI	Delta2	RNI	RMR	χ^2 Dif
Proposed Model	100	367	901	925	925	099	250
Uncorrelated Model	102	617	850	856	854	235	
Two-Factor Model	100	447	826	903	902	098	
One-Factor Model	105	1,256	.666	678	.675	138	
Null Model	136	3,675	.315			361	

Note CHI = chi square, GFI = goodness of fit index, Delta 2 = Delta2 fit index, RNI = relative noncentrality index, RMR = Root mean square residual, χ^2 Dif = chi square difference value

Table 3 *Means (Standard Deviations) for Exhaustion, Cynicism & Professional Efficacy and Cronbach's alpha by Setting*

Occupational Group	Exhaustion	Cynicism	Efficacy
Tertiary Care Hospital, $n = 3,312$			
Mean (*SD*)	2.77 (1.45)	1.75 (1.26)	4.53 (.99)
Kurtosis	−.71	.03	−.29
Skew	.24	.73	−.51
α	.89	.77	.73
Psychiatric Facility, $n = 415$			
Mean (*SD*)	2.54 (1.53)	1.88 (1.44)	4.29 (1.01)
Kurtosis	−.89	−.37	−.40
Skew	.35	.63	−.43
α	.91	.84	.78
From Schaufeli, Leiter, & Kalimo (1995)			
Aircraft technicians, $n = 172$			
Mean (*SD*)	2.36 (.093)	1.59 (1.20)	4.45 (.94)
α	.84	.83	.76

Table 5 displays the average item scores, standard deviations, and Cronbach alpha coefficients of internal consistency for each of the four groups. The one-way ANOVA tests for each of the three burnout dimensions was statistically significant. Tukey tests assessed pairwise comparisons among the four groups. Management scored significantly lower on cynicism and significantly higher on professional efficacy than did all other groups. Nursing scored significantly higher on exhaustion than all other groups. In addition, clerical/maintenance staff scored higher on cynicism than did technologists.

A perspective on the validity of the scale was provided by examining relationships of the three MBI—GS subscales with participants' written responses. This analysis examined the 853 participants of the tertiary care hospital sample who made written comments in addition to the questionnaire responses. The analysis computed correlations between scores on each of the three MBI—GS subscales with a variable indicating whether the comment made by a participant was on a particular topic (1) or not on that topic (0). Table 6 indicates that people making comments noting problems in the quality of care at the hospital scored higher on exhaustion and cynicism and lower on professional efficacy. In contrast, people who made positive comments about management scored higher on professional efficacy and lower on exhaustion and cynicism. Those criticizing management or their immediate supervisor in their comments scored higher on exhaustion and cynicism, as did those commenting on low morale and job insecurity. Participants commenting on harassment or stress at work scored higher on exhaustion, while those commenting on lack of respect in personal relationships at work scored higher on cynicism.

The skew and kurtosis of the depersonalization scale of the MBI has presented some scale difficulties in analyzing the relationship of that construct with personal

Table 4 *Model Comparisons: Occupational Groups*

Model: Clerical & Maintenance (n = 609)	DF	CHI	GFI	Delta2	RNI	RMR	χ^2 Dif
Proposed Model	100	470	.912	.918	.917	.093	198
Uncorrelated Model	102	668	886	.874	.873	.167	
Two-factor Model	100	577	.885	.894	.893	.105	
One-factor Model	105	3010	.616	.355	.351	.397	
Null Model	136	4609	.411	.000	.000	296	
Model: Technologists (n = 515)	DF	CHI	GFI	Delta2	RNI	RMR	χ^2 Dif
Proposed Model	100	369	.919	.922	.921	.092	212
Uncorrelated Model	102	581	.885	.861	.859	.182	
Two-factor Model	101	487	.886	.888	887	.182	
One-factor Model	105	1549	.660	.580	.576	.123	
Null Model	136	3542	410	.000		.296	
Model: Nursing (n = 1,257)	DF	CHI	GFI	Delta2	RNI	RMR	χ^2 Dif
Proposed Model	100	675	.940	940	.940	.091	690
Uncorrelated Model	102	1365	.887	.868	.868	.209	
Two-factor Model	101	879	908	.774	.772	.096	
One-factor Model	105	3674	.663	.627	.626	124	
Null Model	136	9679	.357			.329	
Model: Management (n = 310)	DF	CHI	GFI	Delta2	RNI	RMR	χ^2 Dif
Proposed Model	100	203	.928	.958	957	.078	140
Uncorrelated Model	102	343	.891	.900	899	181	
Two-factor Model	101	294	.887	944	.943	.108	
One-factor Model	105	1215	.578	.537	.531	156	
Null Model	136	2502	.377			317	

Note CHI = chi square, GFI = goodness of fit index, Delta2 = Delta2 fit index, RNI = relative noncentrality index, RMR = Root mean square residual, χ^2 Dif = chi square difference value

qualities and organizational features. For the combined sample cynicism showed a more normal distribution, although still positively skewed (Skew = .73 [Tertiary Hospital]; Skew = .63 [Psychiatric Facility]), kurtosis was near that of a normal distribution (Kurtosis = .03 [Tertiary Hospital]; Kurtosis = −.37 [Psychiatric Facility]). In contrast the MBI administered to hospital-based health care providers (Leiter & Durup, 1994) had kurtosis and skew greater than one (Skew = 1.23; Kurtosis = 1.11). A more normal distribution for the cynicism measure will facilitate identifying relationships of this construct with aspects of organizational environments and personal experience.

Table 5 *Means (Standard Deviations) for Exhaustion, Cynicism & Professional Efficacy and Cronbach's alpha by Occupational Groups: Tertiary Care Hospital*

Occupational Group	Exhaustion	Cynicism	Efficacy
Clerical/Maintenance, $n = 609$			
Mean (*SD*)	2.70 (1.56)	1.92 (1.35)	4.54 (1.03)
α	.90	.74	.70
Technologists & Therapists, $n = 515$			
Mean (*SD*)	2.65 (1.31)	1.72 (1.14)	4.54 (.93)
α	.87	.74	.70
Nursing, $n = 1257$			
Mean (*SD*)	2.98 (1.38)	1.80 (1.24)	4.41 (.99)
α	.89	.80	.75
Management, $n = 310$			
Mean (*SD*)	2.55 (1.40)	1.32 (1.06)	4.73 (.88)
α	.90	.76	.77
One-way ANOVA $F_{(3, 2687)}$	12.79	16.89	9.78
Significance ($p <$)	(.0001)	(.0001)	(.0001)

Table 6 *Relationship of Maslach Burnout Inventory — General Survey Scores and Written Responses*

Category	Exhaustion	Cynicism	Efficacy
Problems with quality of care	.12**	.09**	-.08*
Management: Positive	-.09*	-.08*	.07*
Work overload	.18**	.08*	
Management: Critical	.08*	.09**	
Supervisor: Critical	11**	.08*	
Low morale	.13**	.12**	
Job insecurity	.08*	.07*	
Harassment	.13**		
Stress and burnout	.11**		
Lack of respect		.08*	

Note $*p < 05$, $**p < 01$, $n = 853$

DISCUSSION

The confirmation of a three-factor structure for the MBI—GS that parallels that of the MBI provides evidence that burnout need not be restricted to occupational issues related to service provision. The consistent factor structure across organizations and across occupational groups within health care settings indicates a continuity of the MBI—GS with the burnout construct as assessed by the MBI among human service providers. The contrasts in scores among the study groups

confirmed that the structure of the scale remained consistent through a wide range of responses. The contrast of the Proposed Model with the Two-Factor Model was especially relevant in this regard. Analyses of the MBI factor structure found that its emotional exhaustion and depersonalization subscales tended to be reduced to a single factor when the MBI was used with populations outside of human service providers. The confirmation of a three-factor structure over a two-factor structure with the various occupational groups in this study is consistent with extending the full complexity of the burnout model to wider occupational groups. This section considers the potential of the MBI—GS to contribute to research and applied psychology.

The continuity of the burnout construct across providers of direct care services, support services, management, as well as maintenance and clerical services confirms the generalizability of the construct. Human service burnout, with its focus on the service providing relationship, is one form of a general phenomenon. People in a wide range of occupations respond to chronic fatigue at work with attempts to distance themselves psychologically from their careers. The term, burnout, is used in various lines of work (Maslach, 1993). Berne (1995) described the generality of exhaustion across artistic occupations of writers, musicians, and film makers. Accompanying attempts to withdraw from exhausting occupational demands are decreases in subjective experience of effectiveness. While this pattern of experience is directly pertinent to people providing services to others, it is relevant to a wider range of work as well. In fact, it is proposed that burnout, as measured by the MBI—GS, pertains to any occupation in which people are psychologically engaged in the job.

Psychologically engaging work depletes cognitive, emotional, and physical resources. When in a state of balance, people renew these resources through rest, learning, social support, and successful experiences. An imbalance of depletion through demands over renewal results in chronic exhaustion. An imbalance may come about through changes in an individual's psychological or emotional health, in demands at work, or in psychological contracts. Psychological contracts are the mutual understanding of an employer and an employee regarding a job (Rousseau, 1995). They include assumptions about qualities that pertain to the burnout experience, including reasonable work loads, involvement in decision making, and recognition. Major disruptions in psychological contracts change the means through which people maintain the balance of demands and renewal at work. Recently, Schaufeli, Van Dierendonck, and Van Gorp (in press) showed that burnout is related to a lack of experienced reciprocity at the organizational level: When individuals feel that they invest more in their organization than they receive in return, they tend to burn out.

The broader scope of the MBI—GS provides a means of assessing the full range of occupations within a human service organization, such as a large hospital, using a single scale responsive to their concerns. While the MBI remains the preferred instrument for surveys that focus specifically on direct providers of human service, especially for issues pertaining to the therapeutic relationship, the MBI—GS is appropriate for more diverse populations.

Differences between the settings are consistent with developments at the institutions. The higher exhaustion at the tertiary care hospital reflects the increasing demands of acute treatment settings with diminishing staff resources. Staff members experienced themselves as confronting increasing acuity in cases without

additional resources. They also experienced considerable decrease in job security over the previous six months. However, their work continued to be engaging as reflected in the low level of cynicism and to provide positive performance feedback, reflected in the high level of professional efficacy. In contrast, the psychiatric setting was managing a decrease in demand as a significant part of its mandate was transferred to community-based programs in recent years. The day-to-day work was not as exhausting, but staff members were uncertain about their future. The higher level of cynicism was consistent with the perception of many staff that the change in mandate indicated a devaluing of their work by the larger community. It also reduced opportunities for positive performance feedback, which is generally less clear-cut in psychiatric work than in acute medical care (Leiter, 1988). A separate analysis will investigate predictors of burnout across the two settings in more depth. The differences found here suggest that the MBI–GS is sensitive to variations in all three aspects of burnout across settings. Extensive further research is required to determine occupational norms for the scale.

The relationship of the MBI–GS subscales with the open-ended written comments contributes to the validity of the scale. The comments reflected issues of concern to participants at the time of completing the survey that included the MBI–GS. The relationship of all three components with concerns about the quality of care and conversely with a positive view of management is consistent with the scale's focus on employees' engagement with their work. Engagement in work is reflected in an active concern about enhancing quality and maintaining an environment consistent with career aspirations. The relationships of exhaustion and cynicism with harassment, abuse, and disrespect among staff members emphasize the importance of the social environment at work to personal fulfillment.

Additional research and analysis should explore the relationships among the MBI–GS subscales to determine the extent to which they reflect those of the MBI (Lee & Ashforth, 1993; Leiter, 1993). The analysis presented here suggests that the cynicism dimension may play a stronger role than depersonalization. Although its distribution is skewed to the low end of the scale, the skew is not as severe as that found for depersonalization. Its more even distribution will permit it to play a distinct role from exhaustion in statistical explorations of models.

Further work with the MBI–GS is needed to consider its range of applicability, and to establish norms for various occupational groups. This analysis indicates significant differences between occupational groups within one setting; more extensive differences are likely with a full consideration of the scale across settings and across cultures. The initial development of the MBI–GS in three languages (Dutch, English, and Finnish) emphasizes its international perspective. It is hoped that the scale will be soon translated into other languages.

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