

Staff Burnout and Patient Satisfaction: Evidence of Relationships at the Care Unit Level

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Research on burnout has thus far focused primarily on the individual; however, in work environments in which teamwork is emphasized, it seems plausible that a meaningful group-level burnout construct could emerge. This theory was tested by examining burnout in psychosocial rehabilitation teams and its effects on patient satisfaction. Three hundred thirty-three staff from 31 behavioral health teams completed the Maslach Burnout Inventory; 405 of the clients they served completed the Consumer Satisfaction Scale. Multilevel analyses (hierarchical linear modeling) confirmed the existence of a meaningful team-level burnout construct. Team-level analyses revealed significant relationships between team burnout and patient satisfaction.

At a time when health care providers are under considerable pressure to do more with less, there is increased danger of raising staff workloads to a level at which performance suffers. Staff's ability to focus on treatment may be impaired if competing demands for their attention and cognitive energy are too high. One might speculate that undesirably high levels of staff job stress would lead to diminished quality of care, and indeed an association between stress and performance has been demonstrated in social service settings (Wright & Cropanzano, 1998). However, the effects of staff job stress on such treatment outcomes as patient satisfaction have thus far received little research attention.

One of the few studies ever published on the subject was that of Leiter, Harvie, and Frizzell (1998). This study, conducted with tertiary care hospital staff, found that patients of staff who reported higher levels of emotional exhaustion reported significantly lower levels of satisfaction with their care. The present study examines whether a similar pattern of results is present for staff–patient relationships

occurring in behavioral health teams. First, however, some background on staff burnout and the measurement of patient satisfaction is in order.

Staff Burnout

Although numerous definitions of staff burnout exist, the construct is typically associated with a set of negative attitudes, emotions, or behavior resulting from occupational stress (Cherniss, 1980; Maslach & Jackson, 1984). The most widely researched model of burnout suggests that the construct consists of three factors: Emotional Exhaustion, the extent to which staff members feel emotionally drained and overwhelmed by their work; Depersonalization, the level of emotional withdrawal staff feel from their work and clients; and Personal Accomplishment, a factor negatively correlated to the other two burnout constructs, which measures the extent to which staff members feel that their work is making a unique, positive contribution to clients and the team (Maslach & Jackson, 1986).

This model of burnout has been applied broadly, particularly in health care and social services. One area in which burnout has particular relevance is in behavioral health teams, which contain elements of both traditional health care and social services. In particular, programs catering to people with severe mental illness will often have a mission beyond the delivery of health services, which will include assisting clients with other needs such as securing clothing or housing (Corrigan, Rao, & Lam, 1999). Perhaps partly for this reason, burnout among staff of behav-

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ioral health programs is frequently studied (Leiter & Harvie, 1996). Despite this research attention, however, little data are currently available regarding possible links between staff burnout and client perceptions of service quality or satisfaction with care. Behavioral health programs differ from other types of health programs in several ways, each having a potential bearing on the staff–patient relationship, and therefore leading to the hypotheses examined in the present study. These differences are summarized below.

Emphasis on Relationships

Most behavioral health practitioners would agree that patient–provider relationships are an essential component of overall quality of care. In behavioral health services, however, these relationships take on additional importance. Specifically, it is within the context of the staff–client relationship that many of the treatment services take place; thus the relationship itself is considered an instrument of service provision. For this reason, any elements that might interfere with a staff person’s ability to foster relationships with clients would be expected to diminish satisfaction with those services. Thus, our first hypothesis is that staff Depersonalization, which is a measure of staff’s emotional distancing from clients and their work, will be significantly and negatively associated with consumer satisfaction with care.

Emotional Involvement With Work

Most health care service providers are faced with high levels of need on the part of their clientele. Many consumers of behavioral health services, particularly those served by public behavioral health programs, have difficulty meeting basic needs such as food, clothing, and shelter. Because basic needs must be addressed for psychosocial rehabilitation to be effective, it is often incumbent on behavioral health staff to provide high levels of support to clients before treatment can even begin in earnest. As such, resilience to Emotional Exhaustion is likely to be essential to service quality among staff in these sites. For this reason, our second hypothesis is that staff who are experiencing greater levels of Emotional Exhaustion will have greater difficulty delivering effective treatment, resulting in lower satisfaction with care. In other words, we expect that Emotional Exhaustion will be significantly and negatively correlated with patient satisfaction.

Additionally, like most health care providers, be-

havioral health staff are in part motivated by their ability to effect improvements in their clients’ lives, which is why many of these individuals choose careers in the helping professions to begin with. For this reason, staff’s sense of pride in their accomplishments is hypothesized to guard against the deleterious effects of job stress, and thus indirectly affect the perceived quality of care on their unit. This leads us to our third hypothesis, that Personal Accomplishment among staff on a particular unit will be significantly and positively correlated with the patient satisfaction on that unit.

Team Approach

Staff and clients surveyed in the present study were part of a treatment paradigm known as psychosocial rehabilitation. Group-focused treatment is a hallmark of the psychosocial rehabilitation approach, with clients typically involved in numerous skills training groups throughout the day. For this reason, the importance of a primary care provider is diminished, because the entire staff provides services to the entire patient group. This distinction is important, because it places limits on the ability to meaningfully match individual staff data with individual patient data; the treatment unit as a “whole” is the more salient level of analysis in this type of treatment modality. Additionally, given the level of interaction both within and between clients and employees, a greater level of concordance between perceptions might be expected to develop, which would also make group-level analyses more meaningful.

Method

Participants in this study were staff and clients of 48 behavioral health programs in the midwestern United States. Programs included inpatient and community programs, all serving people with severe mental illness using psychosocial rehabilitation approaches. Staff surveys were part of ongoing research protocols being conducted by the University of Chicago Center for Psychiatric Rehabilitation, and participation on the part of staff and clients was voluntary.

Teams were used in the study only if at least two clients and two team members provided complete data for the survey administration time used. A total of 31 teams from an initial pool of 48 met these criteria, yielding a 65% inclusion rate at the team level. The 31 teams included 333 staff respondents (mean per team = 10.7) and 405 consumer respondents (mean per team = 13.1). Eleven of the teams were from public hospitals; the remaining 20 were from community-based care providers. For staff respondents who provided demographic data, average age was 44 years ($SD = 10$). Average tenure with the organization was 8.2

years ($SD = 6.5$). Seventy-five percent were women; 21% were non-Caucasian (15% African American, 5% Latino, and 1% other). Approximately 11% of staff were high school or GED level of education; 24% had an associate's degree; 6% had some college; 17% had 4-year college degrees; 34% had master's-level educations; and 7% held a doctoral degree.

Staff Survey

Staff completed the Maslach Burnout Inventory (MBI; Maslach & Jackson, 1986), a 22-items measure of the three factors of burnout (Emotional Exhaustion, Depersonalization, and Personal Accomplishment). Respondents rate each of the 22 statements on a 7-point Likert scale for frequency (0 = *never*, 6 = *every day*). For the Emotional Exhaustion and Depersonalization subscales, higher scores reflect higher levels of burnout; for the Personal Accomplishment subscale, lower scores are associated with higher burnout levels. MBI scores were calculated by averaging responses within subscales. A recent meta-analytic study of this model found strong support for the three-factor structure of the MBI and some support for convergent and divergent validity of the factors (Lee & Ashforth, 1996).

Client Survey

Clients of the behavioral health programs responded to the Consumer Satisfaction Scale (CSS), a modified version of the Patient Satisfaction Inventory (Corrigan & Jakus, 1993a, 1993b). This modified version incorporated slight wording changes to facilitate its applicability to a greater diversity of psychosocial rehabilitation programs.

The measure was originally developed to address the difficulties associated with gaining reliable and valid satisfaction data from consumers of behavioral health services (Corrigan, 1990). Items are rated according to how the respondent compares the current program in which he or she is involved with a referent program the consumer identifies based on prior experience. The CSS contains four subscales. The Satisfaction With the Environment subscale consists of 9 items measuring satisfaction with the physical characteristics of the treatment setting (e.g., satisfaction with the temperature of the rooms in which treatment was conducted and furniture in the rooms). The Satisfaction With the Therapist subscale contains 10 items measuring perceptions of the staff providing services (e.g., therapists' ability to communicate clearly and therapists' knowledge about mental illness). The Satisfaction With Treatment subscale contains 12 items measuring satisfaction with various aspects of the treatment services themselves (e.g., clarity of staff's expectations around treatment and level of activity in psychosocial groups). The Satisfaction With Preparation for Autonomy subscale contains 9 items measuring respondent satisfaction with the preparation they received to live in a less restrictive environment (e.g., extent to which they felt treatment had decreased their risk for rehospitalization and extent to which they were prepared to get a job). All items on the CSS are responded to according to a 7-point Likert-type scale. Prior research found this instrument had acceptable internal consistency and test-retest reliability (Corrigan & Jakus, 1993a).

Results

Cronbach's alphas were calculated for each of the subscales used in the study and are reported in Table 1. All appeared to be acceptable, with many reaching .90 or higher. Means and standard deviations were similar to those reported in previous studies involving similar client groups (Corrigan & Jakus, 1993b). Burnout scores were similar to the normative data provided by Maslach and Jackson (1986), with the exception of Personal Accomplishment, in which the present group scored in the upper one third of the normative group range.

Levels-of-Analysis Testing

Because the MBI has historically been regarded as measuring individual-level phenomena, and because patient satisfaction is thought to comprise individual differences as well as true differences in services provided, the appropriateness of a team-level analysis for both sets of variables needed to be examined prior to testing the hypotheses. Given our earlier discussion of psychosocial rehabilitation teams—and, in particular, the level of within-group interaction present in this type of treatment—we believe there is sufficient conceptual grounds for data aggregation. However, this leaves the question of whether there is sufficient evidence that aggregation makes sense on empirical grounds.

Several statistics were consulted to evaluate the appropriateness of aggregation. First, we examined the degree of within-group variance in comparison with the overall variance in the sample. The hierarchical linear modeling (HLM) approach, in particular, focuses on the relative contribution of these levels of analysis to the explanation of overall variance. For the present study, this analysis was conducted using the software package HLM Version 4.04 (Scientific Software International, Inc.), using the three subscales of the MBI as well as the subscales of the CSS.

The HLM analysis provided estimates of between-groups and within-group variance for each variable, which were used to compute the proportion of the variance attributable to the group level (intraclass correlation coefficient, or ICC(1); Shrout & Fleiss, 1979) as well as a significance test on the between-groups variance (Bryk & Raudenbush, 1992). ICC(1) provides an index of whether the variance scores are due to individual or team-level factors or both. The extent to which each group's mean provides a reliable estimate of the group's standing on a variable,

Table 1
Correlation Matrix for the Staff and Consumer Measures

Measure	M	SD	α	1	2	3	4	5	6	7
Consumer Satisfaction Survey										
1. Satisfaction With the Environment	41.2	11.1	.94	—						.17
2. Satisfaction With the Therapist	52.7	11.7	.95		.48**		.64**		-.13	.36*
3. Satisfaction With Treatment	57.9	14.3	.93			.73**	.75**		-.30	.24
4. Satisfaction With Preparation for Autonomy	43.7	11.9	.95				.85**		-.43*	.26
Maslach Burnout Inventory									-.37*	
5. Emotional Exhaustion	17.2	10.9	.95							-.28
6. Depersonalization	5.4	5.2	.79						.52**	-.50**
7. Personal Accomplishment	37.4	7.9	.81							—

Note. Number of teams = 31.
* $p < .05$ (two-tailed). ** $p < .01$ (two-tailed).

ICC(2), was computed on the basis of the HLM variance estimates and the group size.

Aggregation can also be justified using an index of agreement, such as r_{wg} (James, Demaree, & Wolf, 1993), which compares the within-group variance with a theoretical distribution rather than the observed between-groups variance. A rectangular error distribution was assumed in the calculation of r_{wg} values. A group was viewed as having adequate level agreement if r_{wg} was greater than .7 (James et al., 1993).

The results provided mixed evidence for a team-level analysis of the MBI. A small but significant proportion of variance was between groups for Emotional Exhaustion, $ICC(1) = .17, \chi^2(30) = 89.2, p < .01$; Depersonalization, $ICC(1) = .17, \chi^2(30) = 94.0, p < .01$; and Personal Accomplishment, $ICC(1) = .15, \chi^2(30) = 45.0, p < .05$. The reliability of group means, ICC(2), was low, ranging from .25 to .81 for Emotional Exhaustion ($M = .58$), from .27 to .82 for Depersonalization ($M = .59$), and from .07 to .48 for Personal Accomplishment ($M = .25$). In contrast, r_{wg} indicated substantial within-group agreement. The mean r_{wg} was .76 for Emotional Exhaustion, .75 for Depersonalization, and .83 for Personal Accomplishment; r_{wg} was above .7 for the majority of groups: 77% for Emotional Exhaustion, 67% for Depersonalization, and 88% for Personal Accomplishment.

For the CSS, significant amounts of variance were attributable to the team level for all four subscales: Satisfaction With the Environment, $ICC(1) = .25, \chi^2(47) = 124.2, p < .01$; Satisfaction With Treatment, $ICC(1) = .11, \chi^2(30) = 69.4, p < .01$; Satisfaction With the Therapist, $ICC(1) = .10, \chi^2(30) = 63.9, p < .01$; and Satisfaction With Preparation for Autonomy, $ICC(1) = .17, \chi^2(40) = 93.5, p < .05$. The reliability of group means was acceptable for the Satisfaction With the Environment subscale. The mean ICC(2) was .74, and 86% of the groups had values above .7. The ICC(2) values were lower for the other scales. For Satisfaction With Treatment, ICC(2) ranged from .34 to .72, with a mean of .53. For Satisfaction With the Therapist, ICC(2) ranged from .32 to .70, with a mean of .51. For Satisfaction With Preparation for Autonomy, ICC(2) ranged from .44 to .78, with a mean of .63. Within-group agreement was high for all four dimensions of the CSS. The mean r_{wg} was .83, .88, .87, and .79 for the Satisfaction With Environment, Treatment, Therapist, and Autonomy subscales, respectively. Across the scales, between 86% and 89% of the groups had r_{wg} values greater than .7.

Taken together, these results suggest that, although

a substantial proportion of the variance is present at the individual level, there is also sufficient group-level variance to suggest that analysis at this level will yield meaningful results. Thus, given the group-level nature of service delivery in these teams, a group-level approach is used.

Team-Level Hypothesis Testing

Because the HLM analyses showed evidence of group-level effects, team-level analyses were considered justifiable. Hypotheses about team-level relationships between burnout and patient satisfaction were tested by using correlations calculated between means of staff and consumer survey scores at the care unit level. Unit-level scores were calculated as mean scores across all staff or consumer respondents associated with a given care unit. The overall correlation matrix, shown in Table 1, reveals significant relationships between staff Emotional Exhaustion and three of the consumer satisfaction measures: Satisfaction With the Environment, $r(30) = -.42, p < .05$; Satisfaction With Treatment, $r(30) = -.43, p < .05$; and Satisfaction With Preparation for Autonomy, $r(30) = -.37, p < .05$. Staff Personal Accomplishment, in contrast, correlated significantly with Satisfaction With the Therapist, $r(30) = .36, p < .05$, providing partial support for this hypothesis. Depersonalization did not significantly correlate with any of the consumer satisfaction measures.

Four exploratory regression analyses were then conducted to examine the relative strength and contribution of the burnout constructs to each of the four dimensions of patient satisfaction. Complete results of these analyses are reported in Table 2. Results generally replicate those found in the correlation

analysis; however, for Satisfaction With Treatment, Depersonalization emerged as a significant predictor in addition to Emotional Exhaustion.

Discussion

From a statistical perspective, the multilevel analysis of burnout suggested that each of the three components is significantly affected by team-level factors. Without more information about the teams themselves, however, it is difficult to interpret these findings. One plausible explanation is that the way the teams are run is affecting the burnout levels of the team members (e.g., a leadership effect). Alternatively, the effect could be attributed to a selection effect, in which staff tends to perceive a better "fit" with others of similar burnout levels.

Regarding the client satisfaction data, a statistically significant proportion of variance could be attributed to team-level effects. The amount of this variance ranged from 10% (for Satisfaction With the Therapist) to 25% (for Satisfaction With the Environment), for an overall average of roughly 16%. Although multilevel analytic information about patient satisfaction data is also currently sparse, at least one prior study (Sixma, Spreeuwenberg, & van der Pasch, 1998) found a pattern of multilevel effects of similar magnitudes, suggesting that some amount of cautious generalization of the present pattern of results may be warranted.

Examining patient and staff relationships at the team level, the overall pattern of results from this study suggests that the Emotional Exhaustion component of burnout has the clearest relationship to client satisfaction. The link to Emotional Exhaustion is consistent with the growing research consensus

Table 2
Summary of Regression Analysis for Variables Predicting Patient Satisfaction

Predictor	Patient satisfaction dimension											
	Environment			Therapist			Treatment			Autonomy		
	<i>B</i>	<i>SEB</i>	β	<i>B</i>	<i>SEB</i>	β	<i>B</i>	<i>SEB</i>	β	<i>B</i>	<i>SEB</i>	β
Emotional Exhaustion	-.74	.30	-.49*	-.33	.17	-.37	-.76	.23	-.60**	-.42	.20	-.43*
Depersonalization	.64	.77	.19	.77	.43	.38	1.45	.58	.50*	.58	.50	.26
Personal Accomplishment	.34	.54	.12	.71	.31	.44*	.72	.41	.31	.48	.35	.27
<i>R</i>		.45			.51			.59			.45	
<i>R</i> ²		.20			.26			.35			.20	
Adjusted <i>R</i> ²		.12			.18			.28			.11	

Note. Number of teams = 31.

* $p < .05$ (two-tailed). ** $p < .01$ (two-tailed).

that this factor seems to be the key dimension of burnout (e.g., Cordes & Dougherty, 1993). Depersonalization, in contrast, did not relate significantly to the patient satisfaction variables in the correlation analysis, although it did relate to Satisfaction With Treatment (in the direction opposite of that expected) in the regression analysis. Overall, these results suggest that Depersonalization may not be as noxious to service quality. Personal Accomplishment, on the other hand, related specifically to patient views of the therapeutic staff. To the extent that this finding may generalize, it suggests that fostering opportunities for staff to feel a sense of personal accomplishment on the job may be an appropriate intervention for improving patient perceptions of staff.

This study raises a number of questions that would be worthwhile for future study. For example, one might speculate that the strength of the relationship between staff and consumer variables will increase as a function of the frequency of consumer–staff contact. More frequent contact would be expected in settings where staff–consumer ratios are higher and where intensity of service is greater, such as inpatient settings. Other potential moderators are average level of independence of the clientele served and the staff–client ratio, both of which could be associated with the average level of demand placed on staff, and therefore to burnout.

There are several important limitations of the present study that should be kept in mind when considering these results. A key limitation of this study is that although the results suggest burnout is a multilevel phenomenon, only a single level of analysis—the team level—could be completed. Psychosocial rehabilitation programs commonly use a group-based care model, in which treatment is provided by a care team rather than an individual therapist, so a mapping of individual clients to individual care providers would not make sense.

Although a client-to-provider mapping is not possible, however, it is possible that individual clients have different (perhaps very different) experiences with the behavioral health staff, even within the same program. For example, although a team is responsible for treatment, each team member probably provides different levels of care within and between the clients of the program. One might expect that any relationship between burnout and satisfaction would be intensified for patients having more contact with the more burned-out staff and attenuated for patients having more contact with the less burned-out staff. The present model did not account for such within-care-unit variations in service provision, which was

unfortunate given the amount of within-team variance present in this study. Further, because participation in the study was voluntary, and not all staff and patients participated, a selection bias may have affected the reported results in ways that would be difficult to speculate about.

Finally, it should be noted that there is currently some controversy over how one best decides the most appropriate level or levels for analysis (Klein et al., 2000). For example, consider the effect of using a WABA (within-and-between-analysis; Dansereau, Alutto, & Yammarino, 1984) approach instead of HLM to make this determination. Results of a WABA analysis would have concluded that all of the effects discussed herein with the exception of Personal Accomplishment were “equivocal.” Dansereau et al. (1984) interpreted such equivocal results as indicating individual differences that do not depend on group membership, suggesting that a team-level analysis would not be appropriate. However, others (e.g., George & James, 1993) have argued that the group-level analyses can often be justified with equivocal results.

Although additional research is needed before general conclusions can be drawn, there now exist several studies suggesting that burnout among health care staff affects client perceptions of care. For administrators seeking to improve patient satisfaction, assessing the well-being of care staff may be a useful place to start. A number of instruments are available that yield valid measures of staff burnout (e.g., Arthur, 1990) that can be used to establish a baseline of staff functioning. Many instruments provide normative data, which are helpful in gaining a sense of relative levels of stress in a team.

A number of interventions have been found effective in attenuating staff burnout, through improving staff coping skills, improving leadership skills, or changing the nature of the work itself. In terms of individual coping, stress inoculation training programs have demonstrated effectiveness in helping staff manage stress (Keyes, 1995; Saunders, Driskell, Johnston, & Salas, 1996). Work climates conducive to coworker support have also been found to be associated with lower job stress (Fisher, 1985), as have supervisor support and satisfaction with supervision (Lee & Ashforth, 1996; Penn, Romano, & Foat, 1988). Finally, interventions geared toward improving the work may be helpful, in that organizational factors such as role conflict, role ambiguity, and work pressure correlate significantly with emotional exhaustion (Lee & Ashforth, 1996).

References

- Arthur, N. M. (1990). The assessment of burnout: A review of three inventories useful for research and counseling. *Journal of Counseling and Development, 69*, 186–189.
- Bryk, A. S., & Raudenbush, S. W. (1992). *Hierarchical linear models: Applications and data analysis methods*. Thousand Oaks, CA: Sage.
- Cherniss, C. (1980). *Professional burnout in human service organizations*. New York: Praeger.
- Cohen, J. (1988). *Statistical power analyses for the behavioral sciences*. Hillsdale, NJ: Erlbaum.
- Cordes, C. L., & Dougherty, T. W. (1993). A review and integration of research on job burnout. *Academy of Management Review, 18*, 621–656.
- Corrigan, P. W. (1990). Consumer satisfaction with institutional and community care. *Community Mental Health Journal, 26*, 151–165.
- Corrigan, P. W., & Jakus, M. R. (1993a). The Patient Satisfaction Interview for partial hospitalization programs. *Psychological Reports, 72*, 387–390.
- Corrigan, P. W., & Jakus, M. R. (1993b). The reliability of severely mentally ill patients' report of treatment satisfaction. *International Journal of Methods in Psychiatric Research, 3*, 215–219.
- Corrigan, P. W., Rao, D., & Lam, C. (1999). Psychiatric rehabilitation. In F. Chan & M. L. Leahy (Eds.), *Health care and disability case management* (pp. 527–564). Lake Zurich, IL: Vocational Consultants Press.
- Dansereau, F., Alutto, J., & Yammarino, F. (1984). *Theory testing in organizational behavior: The variant approach*. Englewood Cliffs, NJ: Prentice-Hall.
- Fisher, C. D. (1985). Social support and adjustment to work: A longitudinal study. *Journal of Management, 11*, 39–53.
- George, J. M., & James, L. R. (1993). Personality, affect, and behavior in groups revisited: Comment on aggregation, levels of analysis, and a recent application of within and between analysis. *Journal of Applied Psychology, 78*, 798–804.
- James, L. R., Demaree, R. G., & Wolf, G. (1993). r -sub(wg): An assessment of within-group interrater agreement. *Journal of Applied Psychology, 78*, 306–309.
- Keyes, J. N. (1995). Stress inoculation training for staff working with persons with mental retardation: A model program. In L. R. Murphy, J. J. Hurrell Jr., S. L. Sauter, & G. P. Keita (Eds.), *Job stress interventions* (pp. 45–56). Washington, DC: American Psychological Association.
- Klein, K. J., & Bliese, P. D., Kozlowski, S. W. J., Dansereau, F., Gavin, M., Griffin, M., et al. (2000). Multilevel analytical techniques: Commonalities, differences, and continuing questions. In K. J. Klein & S. W. J. Kozlowski (Eds.), *Multilevel theory, research and methods in organization: Foundations, extensions, and new directions* (pp. 512–553). San Francisco: Jossey-Bass.
- Lee, R. T., & Ashforth, B. E. (1996). A meta-analytic examination of the correlates of the three dimensions of job burnout. *Journal of Applied Psychology, 81*, 123–133.
- Leiter, M. P., & Harvie, P. L. (1996). Burnout among mental health workers: A review and a research agenda. *International Journal of Social Psychiatry, 42*, 90–101.
- Leiter, M. P., Harvie, P. L., & Frizzell, C. (1998). The correspondence of patient satisfaction and nurse burnout. *Social Science and Medicine, 47*, 1611–1617.
- Maslach, C., & Jackson, S. E. (1984). Burnout in organizational settings. *Applied Social Psychology Annual, 5*, 133–153.
- Maslach, C., & Jackson, S. E. (1986). *The Maslach Burnout Inventory manual* (2nd ed.). Palo Alto, CA: Consulting Psychologists Press.
- Penn, M., Romano, J. L., & Foat, D. (1988). The relationship between job satisfaction and burnout: A study of human service professionals. *Administration in Mental Health, 15*, 157–165.
- Saunders, T., Driskell, J. E., Johnston, J. H., & Salas, E. (1996). The effect of stress inoculation training on anxiety and performance. *Journal of Occupational Health Psychology, 1*, 170–186.
- Shrout, P. E., & Fleiss, J. L. (1979). Intraclass correlations: Uses in assessing rater reliability. *Psychological Bulletin, 86*, 420–428.
- Sixma, H. J., Spreeuwenberg, P. M., & van der Pasch, M. A. (1998). Patient satisfaction with the general practitioner: A two-level analysis. *Medical Care, 36*, 212–229.
- Wright, T. A., & Cropanzano, R. (1998). Emotional exhaustion as a predictor of job performance and voluntary turnover. *Journal of Applied Psychology, 83*, 486–493.

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