# Experiencing Job Burnout: The Roles of Positive and Negative Traits and States

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## Abstract:

Extending recent research efforts on the effects of personality and moods at work, this study examined the impact of personality traits and mood states in job burnout. Specifically, the field study examined the role of 2 personality traits and positive and negative moods (states) in burnout among nurses working at 2 hospitals. Results indicate that extra-version significantly predicted the diminished accomplishment component of burnout, and neuroticism significantly predicted the exhaustion and depersonalization components. Thus, the findings indicate that personality dimensions predict burnout components differentially. Further, positive moods mediated the relationship between extraversion and accomplishment, while negative moods partially mediated between neuroticism and exhaustion. Thus, moods exhibited both direct and mediating effects. Implications for management and suggestions for figure research are offered.

## Article:

Pressures on workers are intensifying as they attempt to provide high-quality service in an environment characterized by rapidly advancing technologies, budgetary cutbacks, shifting priorities, and leaner staffs. Such pressures can be expected to contribute to job burnout. A distinguishing feature of burnout is the belief that resources for coping with stressful conditions are scarce, and therefore individuals must simply "make do" (Lee & Ashforth, 1993). These feelings of defeat, or sometimes hopelessness, may explain why researchers have linked burnout to a variety of mental and physical health problems (Burke & Deszca, 1986; Jackson & Schuler, 1983; Maslach & Pines, 1977), as well as lower organizational commitment (Leiter & Maslach, 1988), increased voluntary turnover (Wright & Cropanzano, 1998), and impaired performance (Wright & Bonett, 1997).

Although the negative consequences of burnout have been the focus of numerous studies during the last 30 years, the question remains as to why some workers in an organization flourish and others report feeling exhausted and anxious, and perceive fewer personal accomplishments. Organizational researchers have proposed that the causes of job burnout are found in both the individual and job environment (Beehr, 1998; Savicki & Cooley, 1983). However, the preponderance of research has focused on the conditions of the job environment (e.g., Friesen & Sarros, 1989; Savicki & Cooley, 1994; Saxton, Phillips, & Blakeney, 1991). Consequently, relatively little attention has been devoted to differences among individuals that may create a greater vulnerability or resistance to job burnout.

The purpose of this study is to refocus some attention on the individual by examining the impact of personality and mood differences on burnout. Although there has been a surge of recent research focusing on traits and states in the organizational literature (e.g., Chen, Gully, Whiteman, & Kilcullen, 2000; Hurtz & Donovan, 2000), the effects of moods on burnout have not been studied previously, but appear to be an important area in need of empirical examination. In the following sections, we discuss the underlying literature, offer hypotheses and results, and discuss the implications. First, however, we discuss the dimensionality of job burnout. Given the importance of job burnout to organizational scientists, as well as practicing professionals concerned with

reducing the effects of burnout, the dimensionality of burnout is an important consideration in substantive research.

## The Three Dimensions of Job Burnout

Currently, most researchers (Lee & Ashforth, 1993; Leiter, 1990) support the use of a three-factor conceptualization of the burnout construct. The first component of burnout, *emotional exhaustion,* is characterized by high frustration, irritability, low energy, and depleted emotional resources (Cordes & Doughtery, 1993; Jackson, Turner, & Brief, 1987; Koeske & Koeske, 1989; Maslach & Jackson, 1981). The second component of burnout, *depersonalization,* encompasses a negative, dehumanizing approach (Jackson et al., 1987) to patients or clients, treating them like objects or numbers. Depersonalization exhibits itself through healthcare workers' extensive use of jargon (Maslach & Pines, 1977), an over-reliance on bureaucratic rules (Daley, 1979), and derogatory language in referring to clients (Cordes & Doughtery, 1993). Finally, *diminished personal accomplishment* refers to feelings of decreased or insufficient progress toward job goals, and a sense a decline in personal job competency (Leiter & Maslach, 1988), leading to a negative self-characterization. Optimistic expectations for the future are replaced by a sense of futility.

Job burnout studies have predominantly focused on workplace conditions (e.g., job roles, supervisor behaviors, types of patients) as antecedents to burnout (for a review, see Cordes & Doughtery, 1993). Despite calls for more investigation into individual differences that may contribute to burnout (e.g., Nagy & Davis, 1985; Savicki & Cooley, 1983), a review of the burnout literature indicates that the role of personality differences has been ignored to a great extent. Nevertheless, not all workers in the same environment report burnout, and researchers continue to offer theoretical frameworks (House, Shane, & Herold, 1996), conceptual reviews of the literature (Judge, 1992), and empirical evidence suggesting the importance of individual differences on work outcomes (e.g., George, 1989; Weiss & Adler, 1984; Weiss & Cropanzano, 1996). Therefore, further examination of the role of individual differences in reported burnout appears to be warranted. In this study, we examine two individual differences: affective personality and moods.

## The Role of Personality in Job Burnout

The past two decades of personality research has focused on the Big Five personality dimensions (Barrick & Mount, 1991; Hurtz & Donovan, 2000), as well as positive affectivity and negative affectivity (Cooper, 2000; Judge, Erez, & Thoresen, 2000; Payne, 2000; Spector, Zapf, Chen, & Frese, 2000; Wright & Staw, 1999). It is not surprising that a significant number of studies in stress and coping have focused on the affective traits of neuroticism and extraversion, given their relationship with negative emotionality and positive emotionality, respectively (Watson, David, & Suls, 1999). Personality may influence psychological well-being through its impact on how individuals react to a stressful situation; that is, through ineffective coping when under stress (Bolger & Schilling, 1991). Emotional aspects of extraversion and neuroticism can motivate individuals' behaviors, including behaviors related to burnout (Cordes & Doughtery, 1993; Zellars, Perrewe, & Hochwarter, 2000).

### *Extraversion*

Extraversion includes such traits as talkativeness, social poise, assertiveness, and venturesomeness (Block, 1961; Botwin & Buss, 1989; Watson & Clark, 1997). While individuals low in extraversion appear quiet or reserved, those high in extraversion are cheerful and energetic (John, 1990), possibly because they engage in more activities to overcome stressful conditions. According to Peterson (2000), the optimism frequently exhibited by extraverts "leads to desirable outcomes because it predisposes specific actions that are adaptive in concrete situations" (p. 49). The ability to adapt may explain in part the positive correlation between optimism and burnout among working college students (Chang, Rand, & Strunk, 2000). One study (Iverson, Olekalns, & Erwin, 1998) reported that workers who were higher in positive affectivity (a primary component of extraversion) experienced less burnout.

## Neuroticism

Neuroticism reflects feelings of distress and nervousness (George, 1989) and underlies the chronic emotional experiences of guilt and frustration (McCrae, 1991). In general, individuals higher in neuroticism possess more negative views of themselves and of others (Watson & Clark, 1984). One explanation for the effects of neuroticism is that it may increase one's susceptibility or exposure to stimuli that generate negative emotions (Bolger & Schilling, 1991; Larsen, 1992).

In addition to the personality differences that employees exhibit, they also exhibit different moods on the job. George and her colleagues (George, 1989, 1991; George & Brief, 1992; George & Jones, 1996) reported significant findings demonstrating that positive and negative moods of employees influence their feelings about work and their behaviors on the job. Weiss and Croparizano's (1996) review of the mood literature concluded that the effects of moods on work outcomes are consistent, pronounced, and complex.

## Moods at Work

*Moods at work* refer to pervasive generalized affective states encountered on the job (George & Brief, 1992). As such, moods have been shown to predict one's impression of a situation and one's own actions (Clark & Isen, 1982). Studies have demonstrated that positive moods encourage helping behaviors (for a review, see George, 1991; George & Brief, 1992) and higher quality service (George & Bettenhausen, 1990), while negative affect is associated with increased absenteeism and turnover (Pelled & Xin, 1999). Research also has suggested that individuals in positive mood states are more optimistic (Fiske & Taylor, 1991), tend to exhibit a greater degree of information processing, integrate divergent stimuli, produce more innovative and flexible solutions to problems (Isen & Daubman, 1984; Isen, Daubman, & Nowicki, 1987; Isen, Johnson, Mertz, & Robinson, 1985), and tend to perceive a higher probability of success (Brown, 1984). Their greater ability to produce more creative solutions may explain why some researchers (Wright & Mischel, 1982) have reported that individuals experiencing more positive moods are, in fact, more successful. Thus, they are likely to have a greater sense of accomplishment.

Alternatively, negative moods are associated with increased self-focused attention (Pyszczynski, Hamilton, Herring, & Greenberg, 1989). Consequently, an individual experiencing frequent negative moods may blame himself or herself and perceive fewer personal accomplishments when he or she fails to achieve expected successful outcomes (e.g., patients with less than full recoveries). Distancing oneself from a perceived source of stress is one type of coping used by employees (Leiter, 1991). For example, attempting to cope with negative moods, a nurse may spend less time with a patient, thus minimizing personal contact and making it more difficult to see the person behind the illness. The patient becomes just another obstacle to avoid for an employee experiencing negative moods on the job. Thus, more frequent negative moods are expected to contribute to tendencies to depersonalize patients.

## Personality, Moods, and Burnout

The distinction between neuroticism and extraversion as a trait, and positive and negative affect as a state (i.e., a mood), is critical in attempting to examine the roles of personality and moods in burnout. Positive affectivity and negative affectivity (traits) represent stable personality differences in affect levels and have been discussed previously as part of the extraversion and neuroticism dimensions. Unlike affective personality differences, positive affect and negative affect as states capture how an individual feels at a given point in time (Watson & Pennebaker, 1989) or in a specific situation. Thus, moods fluctuate over time. However, while moods are less permanent than are affective personality traits, "moods are not normally fleeting experiences, but typically have some duration" (Fiske & Taylor, 1991, p. 411). Further, while a single event may trigger a mood, once established, that mood provides the context for other unrelated events, interactions, and experiences.

Previous research (e.g., Costa & McCrae, 1980, 1984; Emmons & Diener, 1985) has reported a consistent relationship between personality and moods. Further, some have suggested that it is the affective nature of some personality characteristics that influence moods at work, which in turn influence job satisfaction and other work behaviors (Weiss, Nicholas, & Daus, 1993). In the social psychology literature, it is generally accepted that at

any given time, individuals higher in neuroticism are more likely to be in an unpleasant mood state than are individuals lower in neuroticism. Conversely, individuals high in trait positive affectivity (a component of extraversion) tend to have an overall sense of well-being, tend to see themselves as pleasurably engaged in activities, and tend to experience positive emotional states (Tellegen, 1985). Hence, we expect to find a positive association between extraversion and positive moods, and between neuroticism and negative moods. Such a prediction is consistent with the significant Pearson correlations between dispositional and state measures of the Positive Affectivity and Negative Affectivity Scales (PANAS) reported by Wright and Staw (1999), and a mood induction study conducted by Gomez, Cooper, and Gomez (2000).

Researchers have proposed that personality may influence behavior through its influence on internal states (i.e., mood; George, 1991; Nesselroade, 1988), possibly because some personality traits increase one's emotional susceptibility or responsiveness to environmental stimuli (Larsen & Ketelaar, 1991; McCrae & Costa, 1991; Watson & Clark, 1992). Several studies have reported that individuals higher in neuroticism tend to react more negatively and experience more stress to daily problems (e.g., interpersonal conflicts; Bolger & Schilling, 1991; Bolger & Zuckerman, 1995; Suls, Martin, & David, 1998). Bolger and Schilling reported that among 339 adults who kept diaries about daily distress, individuals high in neuroticism, compared to individuals low in neuroticism, were more likely to feel distress from a stressful situation. According to Bolger and Schilling, "Reactivity to stressors accounted for twice as much of the distress difference as exposure to stressors" (p. 355). Suls et al. also reported that individuals higher in neuroticism appeared to exhibit a heightened sensitivity to negative events and were more distressed by daily problems. Earlier, Parkes (1990) reported that teachers higher in negative affectivity showed greater reactivity to work demands. Overall, there appears to be ample evidence indicating that although certain job conditions in a job environment (e.g., patients who have poor outcomes) may generate distress in most nurses, those higher in neuroticism will likely respond more negatively given their heightened responsiveness to aversive stimuli.

It may be that the negative outcomes reported by individuals higher in neuroticism are partially explained by their tendencies to experience more frequent negative moods. Conversely, George (1989, 1991) reported that trait positive affectivity predicted positive mood states, which in turn predicted levels of absenteeism and prosocial behavior. It seems reasonable, therefore, to expect that nurses higher in extraversion report more positive outcomes, in part, because they experience more positive moods.

*Hypothesis 1.* Positive moods will mediate the relationship between extraversion and emotional exhaustion, depersonalization, and diminished personal accomplishment.

*Hypothesis 2.* Negative moods will mediate the relationship between neuroticism and emotional exhaustion, depersonalization, and diminished personal accomplishment.

This study extends the findings reported by Wright and Staw (1999) by simultaneously examining the relationship between personality and moods on burnout. Further, in order to take a conservative approach, we statistically controlled for variables previously demonstrating relationships with burnout: age (Jayaratne, Himle, & Chess, 1991; Maslach & Jackson, 1981, 1985) and hierarchical position (e.g., Friesen & Sarros, 1989). We also controlled for organization to account for any unknown differences in the two hospital settings used in our study. Finally, research (e.g., George, 1989, 1991) has indicated that mood states are influenced by personality traits as well as situational factors (e.g., role stressors), and reviews of the burnout literature (Cordes & Doughtery, 1993; Perlman & Hartman, 1982) have indicated that higher levels of role stressors in a job environment contribute to greater levels of burnout among employees. Therefore, we measured and statistically controlled for three typical job stressors: role ambiguity, quantitative role overload, and role conflict.

## Method
### Sample and Data Collection
The data for this study were drawn from nurses in two hospitals located in the Southeast. The two hospitals, approximately 30 miles (48.28 km) apart, were both acute care facilities offering a wide variety of inpatient and

outpatient services. The Directors of Nursing provided in-house mailing labels for nursing employees based on their employee database information. A cover letter and anonymous questionnaires were sorted by hospital department and were delivered to the nurses via hospital mail. Respondents were given a stamped envelope and were requested to mail their completed questionnaires directly to the first author. A total of 296 (153 and 143, for the two hospitals, respectively) voluntary questionnaires were returned for a 23% response rate (21% and 33% response rates, respectively).

During follow-up interviews, the Directors of Nursing at both hospitals indicated that the demographics of the respondents reflected those of the entire nursing staff. The Directors also noted that it was impossible to determine if all nurses received the questionnaires, since hospital mail delivery relies on volunteers within the departments to sort the mail on a timely basis. It was known, however, that some questionnaires were undeliverable as a result of turnover or interdepartmental staffing changes. The exact number of such questionnaires is not known since hospital personnel simply disposed of questionnaires without counting them; thus, the response rate is likely higher than that reported here.

### Measures
**Burnout.** Levels of burnout were measured with the Maslach Burnout Inventory (MBI; Maslach & Jackson, 1986). The MBI measures the three burnout dimensions: emotional exhaustion (9 items; a = .92), depersonalization (5 items; a = .86), and diminished personal accomplishment (8 items; a = .88). Higher scores indicate greater emotional exhaustion, depersonalization, and less personal accomplishment (i.e., greater diminished personal accomplishment).

**Neuroticism and extraversion**. The two personality dimensions were measured by the NEO Five-Factor Inventory (NEO-FFI), which was developed by Costa and McCrae (1992). The instrument contains 12 items for each dimension. Respondents use a 5-point scale ranging from *1 (strongly disagree)to 5 (strongly agree)* to indicate the degree to which the item describes them. We reverse coded 4 items for neuroticism and extraversion. Higher scores indicate a greater degree of each dimension. Cronbach's alpha coefficients were .85 and .80 for neuroticism and extraversion, respectively.

**Moods on the job.** Respondents' moods (states) on the job were measured using the Job Affect Scale (JAS; Brief, Butcher, George, Robinson, & Webster, 1988), which is based on an integrative analysis of self-reported moods by Watson and Tellegen (1985). The JAS is composed of 10 markers of positive (e.g., enthusiastic) and negative (e.g., distressed) mood. Following Burke and colleagues' (Burke, Brief, George, Roberson, & Webster, 1989) recommendation, and consistent with George (1991), six mood states were summed to determine a positive mood score (a = .88) and six states were summed to determine a negative mood score (a = .91). Using the design of previous research (George, 1989, 1991; George & Bettenhausen, 1990), respondents were asked to indicate how they felt at work during the past week using a 5-point scale ranging from 1 *(very slightly or not at all)* to 5 *(very much).* Higher scores indicate more frequent positive or negative moods.

### Control Variables
**Age.** Respondents were provided a space to indicate their age.

**Position.** The nurses were given a space to indicate their current position within the hospital. Based on information provided by the Directors of Nursing, the nurses were given five options: nursing manager/leader (1), clinical nurse specialist (2), nurse educator (3), staff nurse (4), or other nursing (5).

**Organization.** Discussions with the Directors of Nursing and a *t* test did not reveal any significant differences in the demographic data of the nurses or the working conditions at the two hospitals. However, a *t* test found that the hospitals differed significantly in the number of nurses in five hierarchical positions. For the regression analyses, the hospitals were coded 1 and 2.

**Role stressors in the work environment.** Role ambiguity and conflict were measured using the six-item (cc = .81) and eight-item (a = .86) scales, respectively, as developed by Rizzo, House, and Lirtzman (1970). A sample item measuring role ambiguity is, "I know exactly what is expected of me" (reverse scored). A sample item for role conflict is, "I receive incompatible requests from two or more people." Higher scores indicate that the respondent perceives greater ambiguity or conflict. Quantitative overload was measured using a 10-item (cc = .91) adapted version of the quantitative workload scale developed by Caplan (1971). The items were adapted to reflect nursing jobs and to reflect the respondent's evaluation of the amount of work encountered as *too much* or *unrealistic.* Higher scores indicate that the respondent perceives greater quantitative over-load.

## Results

Because of missing observations, the sample size for the variables ranged from 291 to 296 respondents. Table 1 presents the means, standard deviations, and intercorrelations of all variables. The means for the burnout dimensions were consistent with prior research with nurses (e.g., Maslach, Jackson, & Leiter, 1996; Robinson et al., 1991; Zellars, Perrewe, & Hochwarter, 1999; Zohar, 1997). An analysis of the individual burnout scores indicates that most of the nurses reported average burnout, but our sample also included a significant percentage reporting low burnout and high burnout. To test our hypothesis for each dimension of burnout, we conducted hierarchical multiple regression (i.e., emotional exhaustion, depersonalization, diminished personal accomplishment), and the control variables (i.e., age, position, organization, role ambiguity, role conflict, quantitative role overload) were entered in Step 1. The two personality dimensions (i.e., neuroticism and extraversion) were entered in Step 2; followed by moods (positive and negative), which were entered in Step 3.

Consistent with previous research (Iverson et al., 1998; Zellars et al., 2000), personality dimensions significantly predicted burnout. The models for all three dimensions of burnout were significant: emotional exhaustion (EE; Table 2), $F_{(8, 281)} = 37.22$, $p < .01$; depersonalization (DP; Table 3), $F_{(8, 281)} = 16.15$, $p < .01$; and diminished personal accomplishment (DPA; Table 4), $F_{(8, 281)} = 10.87$, $p < .01$. After statistically controlling for the variance explained by the demo-graphics and three role stressors, the personality variables, entered in Step 2, explained an additional 14% *(p < .01)*, 9% *(p < .01)*, and 12% *(p < .01)* of the variance in EE, DP, and DPA, respectively.

The effects of personality varied across the dimensions. Neuroticism positively predicted EE *(p < .01)* and DP *(p < .01)*, but extraversion failed to significantly predict either EE or DP. Extraversion negatively predicted DPA *(p < .01)*, but neuroticism was not a significant predictor of DPA. In sum, nurses higher in neuroticism reported greater exhaustion and depersonalization, and nurses higher in extraversion reported less DPA; that is, they were able to perceive greater personal accomplishments in their jobs.

Tables 2, 3, and 4 also show that positive and negative moods, entered in Step 3, explained an additional 6% *(p < .01)* and *5% (p < .01)* of EE and DPA, respectively. The additional explained variance for depersonalization was not significant. The effects of moods on EE and DPA varied. Negative mood positively predicted exhaustion, but positive mood did not. Positive mood negatively predicted DPA *(p < .01)*, but negative mood was not significant. In summary, negative mood significantly predicted one component of burnout, exhaustion (Table 2); and positive mood significantly predicted one component of burnout, diminished personal accomplishment (Table 4). Nurses experiencing more negative mood reported greater emotional exhaustion, and nurses experiencing more positive mood reported greater personal accomplishment. Mood had no significant effect on DP.

Table 1

*Means, Standard Deviations, and Intercorrelations of Variables Used in the Study*

| Variable | M | SD | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Age | 42.19 | 9.45 | — | | | | | | | | | | | |
| 2. Organizational position | 3.55 | 1.11 | -.20** | — | | | | | | | | | | |
| 3. Organization | 1.50 | 0.50 | -.04 | .17** | — | | | | | | | | | |
| 4. Overload | 3.99 | 1.21 | .09 | -.03 | .08 | — | | | | | | | | |
| 5. Ambiguity | 2.61 | 0.86 | -.02 | -.02 | -.01 | .36** | — | | | | | | | |
| 6. Conflict | 4.34 | 1.19 | .10 | -.06 | .02 | .60** | .37** | — | | | | | | |
| 7. Neuroticism | 2.51 | 0.64 | -.01 | .05 | -.16** | .09 | .17** | .21** | — | | | | | |
| 8. Extraversion | 3.59 | 0.49 | -.13* | -.07 | .09 | .03 | -.15* | -.12* | -.48** | — | | | | |
| 9. Positive mood | 3.43 | 0.74 | -.01 | -.08 | .01 | -.06 | -.17** | -.08 | -.29** | .57** | — | | | |
| 10. Negative mood | 1.67 | 0.68 | -.04 | .03 | -.08 | .18** | .18** | .28** | .53** | -.22** | -.08 | — | | |
| 11. Exhaustion | 3.27 | 1.12 | -.02 | .03 | .02 | .53** | .33** | .52** | .47** | -.24** | -.23** | .52** | — | |
| 12. Depersonalization | 2.01 | 0.98 | -.17** | .03 | -.01 | .28** | .30** | .41** | .38** | -.19** | -.15** | .36** | .59** | — |
| 13. Dim. accomp. | 2.13 | 0.78 | -.11 | .22** | -.01 | .08 | .27** | .13* | .30** | -.37** | -.42** | .18** | .30** | .30** |

*Note.* Because of missing observations, *N* = 288 to 296. Dim. accomp. = diminished accomplishments.
*p < .05 (one-tailed). **p < .01 (one-tailed).

We predicted that positive mood would mediate the relationship between extraversion and burnout (Hypothesis 1) and that negative mood would mediate the relationship between neuroticism and burnout (Hypothesis 2). Three conditions (Baron & Kenny, 1986) are necessary in order to test for this mediating relationship. First, the independent variable (extraversion or neuroticism, respectively) must predict the mediator (positive or negative mood, respectively). Second, the independent variable must predict burnout (the dependent variable). Finally, mood must predict burnout.

Table 2

*Regression Analyses for Emotional Exhaustion*

| Predictor variable | Step 1 B | Step 1 SE | Step 2 B | Step 2 SE | Step 3 B | Step 3 SE |
|---|---|---|---|---|---|---|
| Step 1 | | | | | | |
| Age | -.06 | .01 | | | | |
| Organizational position | .02 | .04 | | | | |
| Organization | -.01 | .11 | | | | |
| Role ambiguity | .12* | .07 | | | | |
| Role overload | .34** | .06 | | | | |
| Role conflict | .29** | .06 | | | | |
| Step 2 | | | | | | |
| Extraversion | | | -.04 | .11 | -.01 | .12 |
| Neuroticism | | | .37** | .08 | .23** | .09 |
| Step 3 | | | | | | |
| Positive mood | | | | | -.09 | .07 |
| Negative mood | | | | | .28** | .08 |
| Model $F$ | 27.89** | | 37.22** | | 36.70** | |
| Overall $R^2$ | .37 | | .51 | | .57 | |
| $\Delta R^2$ | — | | .14** | | .06** | |

*Note.* Because of missing observations, $N = 290$.
*$p < .05$. **$p < .01$.

Hierarchical regression analysis was used to test the hypotheses. To deter-mine effects on mood, the demographic variables and the three environmental role stressors were entered in Step 1 as control variables, followed by extra-version and neuroticism in Step 2. The results for positive mood are shown in Table 5 and for negative mood in Table 6. The overall model for positive mood was significant, $F(8, 281) = 18.34$, $p < .01$, and explained 34% of the variance in positive mood. After controlling for demographics and role stressors, extraversion positively predicted positive mood *(p < .01)*. The overall model for negative mood was significant, $F(8, 281) = 16.80$, $p < .01$, and explained 32% of the variance in negative mood. After controlling for demographics and role stressors, neuroticism positively predicted negative mood *(p < .01)*.

As reported earlier, extraversion and positive mood significantly predicted the DPA component of burnout (Table 4, Steps 2 and 3, respectively). Therefore, conditions necessary to test Hypothesis 1 were present for the DPA component of burnout. If positive moods mediate between extraversion and DPA, the effect of extraversion on DPA will be less (Baron & Kenny, 1986) when moods are entered into the model (i.e., examining the coefficients for extraversion in Steps 2 and 3 of Table 4). The results reported in Table 4 indicate that the significant effect of extraversion on DPA decreased to a nonsignificant effect when the mood variables were entered into the model. Therefore, the results indicate that positive mood fully mediated the relationship between extraversion and DPA, providing some support for Hypothesis I.

As indicated, neuroticism did significantly predict negative moods (Table 6) and two components of burnout: EE (Table 2, Step 2) and DP (Table 3, Step 2). Negative moods predicted only one component of burnout: EE (Table 2, Step 3). (Recall that when moods were entered into the model for DP, the step was not significant.) Therefore, the necessary conditions for testing a mediating relationship between neuroticism and negative moods and EE were present. If positive moods partially mediated between neuroticism and EE, the effect of

neuroticism on EE would be less but would remain statistically significant (Baron & Kenny, 1986) when moods were entered into the model. The results reported in Table 2 indicate that the significant effect of neuroticism on EE decreased from .37 to .23 when moods were entered into the model. Therefore, the results indicate that negative moods partially mediated between neuroticism and EE, providing some support for Hypothesis 2.

## Discussion

Burnout continues to plague some workers and their organizations. Historically, most of the job burnout research has focused on stressors in the job environment, has discounted the impact of an individual's personality, and has not yet examined the impact of moods. Our findings suggest that the individual remains an important factor in the burnout process and should not be overlooked. We found that personality differences did explain additional variance in reported levels of job burnout after statistically controlling for the variance explained by three common job stressors, demographics, and organization. We also found that moods significantly influenced reported burnout levels. Our approach in testing the impact of moods was conservative in that we statistically controlled for demo-graphics, organization, individual personality, and role stressors, and still found that moods explained additional variance in burnout. Our findings are consistent with recent research (Rhoades, Arnold, & Jay, 2001) that indicated both affective traits and states of employees influenced the conflict-management process.

Table 3

*Regression Analyses for Depersonalization*

| Predictor variable | Step 1 | | Step 2 | | Step 3 | |
|---|---|---|---|---|---|---|
| | $B$ | $SE$ | $B$ | $SE$ | $B$ | $SE$ |
| Step 1 | | | | | | |
|   Age | -.17** | .01 | | | | |
|   Organizational position | .04 | .04 | | | | |
|   Organization | -.02 | .10 | | | | |
|   Role ambiguity | .17** | .07 | | | | |
|   Role overload | .05 | .05 | | | | |
|   Role conflict | .34** | .05 | | | | |
| Step 2 | | | | | | |
|   Extraversion | | | .01 | .12 | .01 | .13 |
|   Neuroticism | | | .30** | .09 | .24** | .10 |
| Step 3 | | | | | | |
|   Positive mood | | | | | -.03 | .08 |
|   Negative mood | | | | | .12* | .09 |
| Model $F$ | 14.22** | | 16.15** | | 13.47** | |
| Overall $R^2$ | .23 | | .32 | | .33 | |
| $\Delta R^2$ | — | | .09** | | .01 | |

*Note.* Because of missing observations, $N = 290$.
*$p < .05$. **$p < .01$.

Table 4

*Regression Analyses for Diminished Personal Accomplishment*

| Predictor variable | Step 1 B | Step 1 SE | Step 2 B | Step 2 SE | Step 3 B | Step 3 SE |
|---|---|---|---|---|---|---|
| Step 1 | | | | | | |
| Age | -.15** | .01 | | | | |
| Organizational position | .18** | .03 | | | | |
| Organization | -.03 | .09 | | | | |
| Role ambiguity | .25** | .05 | | | | |
| Role overload | -.04 | .05 | | | | |
| Role conflict | .10 | .05 | | | | |
| Step 2 | | | | | | |
| Extraversion | | | -.28** | .10 | -.12 | .11 |
| Neuroticism | | | .12 | .08 | .09 | .08 |
| Step 3 | | | | | | |
| Positive mood | | | | | -.28** | .07 |
| Negative mood | | | | | .04 | .07 |
| Model $F$ | 6.68** | | 10.87** | | 11.33** | |
| Overall $R^2$ | .12 | | .24 | | .29 | |
| $\Delta R^2$ | — | | .12** | | .05** | |

*Note.* Because of missing observations, $N = 290$.
**$p < .01$.


Table 5

*Regression Analysis for Positive Mood*

| Independent variable | Step 1 B | Step 1 SE | Step 2 B | Step 2 SE |
|---|---|---|---|---|
| Step 1 | | | | |
| Age | -.01 | .01 | | |
| Organizational position | -.09 | .03 | | |
| Organization | .01 | .09 | | |
| Role ambiguity | -.18** | .05 | | |
| Role overload | .01 | .05 | | |
| Role conflict | -.04 | .05 | | |
| Step 2 | | | | |
| Extraversion | | | .55** | .09 |
| Neuroticism | | | -.02 | .07 |
| Model $F$ | 2.12* | | 18.34** | |
| Overall $R^2$ | .04 | | .34 | |
| $\Delta R^2$ | — | | .30** | |

*Note.* Because of missing observations, $N = 290$.
*$p < .05$. **$p < .01$.

## Personality

Nurses higher in extraversion perceived more personal accomplishments in their jobs, possibly because their inherent sociability provides them with more opportunities to work with others who reinforce their personal accomplishments through feedback or support. Finding that nurses higher in neuroticism experienced greater emotional exhaustion and depersonalization may reflect the ineffective coping mechanisms that these individuals are predisposed to use. Neuroticism has been linked to avoidant coping, self-blame, and wishful thinking, which, in turn, are associated with increased stress (Bolger, 1990; McCrae & Costa, 1986). However, our finding also discloses an opportunity for research that explores the means by which supervisors and coworkers can aid the individual in seeing more positive or rewarding aspects of their jobs. Possibilities include personal counseling, peer mentoring, or stress-management programs that emphasize styles of coping.

Table 6

*Regression Analysis for Negative Mood*

| Independent variable | Step 1 | | Step 2 | |
|---|---|---|---|---|
| | B | SE | B | SE |
| Step 1 | | | | |
|   Age | -.06 | .01 | | |
|   Organizational position | .03 | .03 | | |
|   Organization | -.09 | .08 | | |
|   Role ambiguity | .08 | .05 | | |
|   Role overload | .01 | .04 | | |
|   Role conflict | .25** | .04 | | |
| Step 2 | | | | |
|   Extraversion | | | .04 | .08 |
|   Neuroticism | | | .51** | .06 |
| Model $F$ | 5.09** | | 16.80** | |
| Overall $R^2$ | .10 | | .32 | |
| $\Delta R^2$ | — | | .22** | |

*Note.* Because of missing observations, $N = 290$.
**$p < .01$.

Although individuals higher in neuroticism are predisposed to perceive their situation more negatively than individuals lower in neuroticism, research (Hochwarter, Zellars, Perrewe, & Harrison, 1999) has indicated that positive improvements in some job conditions may improve job satisfaction for high negative affectivity employees. Similar improvements in job conditions for nurses may attenuate burnout, especially among nurses higher in neuroticism. Overall, the results of this study suggest that researchers should not abandon the examination of individual characteristics in studies of experienced burnout.

## Moods

The most important contribution of this study is the examination of the influence of moods on burnout. This study expands the burnout literature by testing and finding that positive moods explain additional variance in a nurse's perceptions of personal accomplishments after controlling for demographics, job role stressors, and personality differences. Similarly, negative moods were found to explain additional variance in reported levels of exhaustion among nurses. Research (Salovey & Birnbaum, 1989) has indicated that individuals experiencing negative emotions (e.g., sadness) are less confident that they can take the necessary steps to alleviate a personal

illness. The effects of negative moods on exhaustion found in this study may reflect a similar belief by the nurses experiencing negative moods on the job. Such moods may contribute to employees' bleak outlooks for the future and for their own abilities to cope with the job, improve their job situations, or fill patients' needs. Alternatively, depressed subjects in a laboratory study have been found to perceive less social support available to them (Cohen, Towbes, & Flocco, 1988). The negative moods of the nurses may reflect a similar belief that the availability of social support at work is lacking. If true, relying on a network of support may weaken negative moods and reduce exhaustion levels. Further research is needed in the relationship of support to moods and how changing sources of support impacts moods on the job.

We found that moods mediate between personality characteristics and components of burnout; that is, moods partially explain which personality characteristics can impact the experience of burnout. The finding that a higher level of exhaustion for nurses high in neuroticism was partially explained by the more negative moods that they experience is an important contribution to this area of research. Further, it is consistent with the mediating role of moods reported by Rhoades et al. (2001) in examining conflict resolution by employees. Similarly, the ability of nurses higher in extraversion to perceive more job accomplishments is partially explained by the more frequent positive moods that they experience. Taking steps to improve the conditions surrounding some jobs may reduce levels of exhaustion among nurses high in neuroticism since moods are partially the result of situational conditions. Organizations that attempt to improve job conditions (e.g., establishing clear policies and procedures to reduce ambiguity) or help employees see positive aspects of their jobs (e.g., positive feedback, regarding accomplishments and past successes) may induce more positive moods (Forgas, 1991, 1998; Smith & Lazarus, 1990) and reduce exhaustion levels. A broad-based, management-supported approach may be needed. Some evidence indicates that a combination of relaxation, stress management, cognitive coaching, and exercise techniques is the best strategy to alter negative moods (Thayer, Newman, & McClain, 1994). Further research is needed to determine the extent to which strengthening positive moods or weakening negative moods can bolster the natural buffer against burnout apparently held by extraverts and reduce the tendencies of high-neuroticism individuals to perceive and react to stimuli in their environments more negatively.

Finally, this study contributes to the understanding of the dimensionality of the burnout construct. Prior research has argued that the dimensions of burnout should be examined as distinct constructs (Lee & Ashforth, 1993). The results of this study not only support this position, but also suggest that these components may have different antecedents. In general, extraversion and positive moods exhibited the strongest effect on diminished personal accomplishment, and neuroticism and negative moods exhibited the strongest effect on emotional exhaustion and depersonalization. Extraversion includes feelings of optimism and positive well-being. Perhaps individuals higher in extraversion are more able to see their achievements and competencies (i.e., personal accomplishment) than are those who are high on neuroticism.

The null findings for extraversion on two of the burnout dimensions are more puzzling. Perhaps feelings of optimism and personal well-being do not have significant effects on fatigue and callousness toward others (i.e., exhaustion and depersonalization). For example, an employee could be optimistic and enjoy interactions with people (i.e., high extraversion), yet still approach his or her patients as individuals and feel exhausted as a result of the workload. In other words, such employees are better able to recognize job successes, yet feel (or not feel) emotionally exhausted and depersonalized from others.

Individuals high in neuroticism think and act in ways that encourage negative emotional experiences across time and situations (George, 1992). Of the three components, perhaps emotional exhaustion and depersonalization represent constructs more emotion laden, or alternatively, the absence of emotion within the burnout phenomenon. Given this, it is not surprising that neuroticism affects these more emotional components. Because the current body of burnout research lacks studies in this area, we recognize the speculative nature of any explanation for the null findings and encourage additional research on the emotional aspects of the components.

## Limitations and Future Research

Perhaps the most serious limitation of the present study is the reliance on cross-sectional, perceptual measures. Self-report data have the potential to inflate observed relationships spuriously, introducing common method variance as an alternative explanation for the findings. Common method variance is a serious concern when there appears to be a generalized and pervasive influence operating in a systematic fashion to inflate the associations among the variables (James, Gent, Hater, & Corey, 1979). Examining the correlation matrix in Table 1, the range of correlations is .01 to .59 and, although many of the correlations are significant, none are uncharacteristically high.

The low response rate was disappointing and clearly could be improved upon in future research. Discussions with the Directors of Nursing following the data collection revealed that the rates were typical of previous questionnaire studies conducted with the nurses by outside researchers. There was no evidence of a response bias based on demographics; however, we do recognize that it is a possibility.

The cross-sectional nature of this research also presents another problem. Specifically, it would be helpful to know the extent to which moods varied over time and whether burnout levels were rising or falling. Longitudinal research is needed to answer these important questions. Another limitation is that the direction of causality cannot be unambiguously determined. Although theory guided the hypotheses about causal relationships, alternative causal flows cannot be ruled out. For example, although it was hypothesized that negative moods contribute to exhaustion, it may be that, over time, higher levels of exhaustion contribute to negative moods or that some type of reciprocal relationship is present. As suggested by Wright and Staw (1999), researchers need to give further attention to the time frame of mood measures when used in conjunction with other dependent variables with different time references.

Research examining additional relationships among moods and other variables important to burnout is also needed. For example, research (Fenlason, Johnson, & Beehr, 1997) has suggested that types of social support have differential effectiveness in reducing strains, and Zunz (1998) argued that protective factors (e.g., social support) might improve one's resiliency to burnout. It could be that positive and negative moods encourage the use of different types of support, attenuating or exacerbating burnout. These limitations notwithstanding, the results of the study indicate that future research in job burnout can be improved by putting the individual back into the burnout process.

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