

## **A Tale of Two Studies: Equal Opportunity Climate and Mission Readiness**



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### Abstract

Workplace discrimination and strain are both linked to mission readiness, as they yield decreased job performance (Cropanzano, Rupp, & Byrne, 2003; Goldman, Gutek, Stein, & Lewis, 2006). Together, they cost US organizations over a billion dollars per day (American Institute of Stress, 2012; Center for American Progress, 2012). Surprisingly, despite these high costs and associations with important organizational factors, little is known about how the two constructs are related. Whereas research suggests that individuals who directly experience harassment are prone to some forms of strain (Goldman et al., 2006), there is a paucity of empirical investigations examining the impact of workplace discrimination on burnout among individuals who simply work in environments where harassment is present. We conducted two studies investigating aspects of equal opportunity climate as predictors of emotional exhaustion among Department of Defense personnel. The first study focused on the leader in terms of task-oriented leadership and leader equal opportunity behaviors and on the unit in terms of unit cohesion. The results of this study indicated that being a good leader in terms of simply focusing on mission accomplishment is insufficient to prevent emotional exhaustion. The second study presents a conditional process model that describes a psychological process in which equal opportunity climate leads to emotional exhaustion indirectly through perceptions of organizational support. Hence, it (1) describes *how* an equal opportunity climate impacts emotional exhaustion, and (2) identifies personality traits that determine for *whom* this process is most important. Both studies suggest opportunities for the development of leaders in the Department of Defense.

<p>The Findings in this report are not to be construed as an official DEOMI, U.S. military services, or Department of Defense position, unless designated by other authorized documents.</p>
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*Keywords:* Burnout, task-oriented leadership, team cohesion, perceived organizational support, equal opportunity climate, discrimination, harassment, JD-R model, personal resources, conscientiousness, and emotional stability.

### A Tale of Two Studies: Equal Opportunity Climate and Mission Readiness

Emotional exhaustion is an increasingly popular topic in the organizational science literature, largely due to a high risk of experiencing it in today's fast-paced, 24/7, and demanding working world (Halbesleben & Buckley, 2004). A chronic lack of energy, emotional exhaustion is one of three components of burnout, the other two being cynicism and diminished personal accomplishment (Maslach, 1982). Of the three components, emotional exhaustion is the best predictor of performance, organizational commitment, turnover, and citizenship behaviors (Cropanzano et al., 2003; Lee & Ashforth, 1996). Preventing emotional exhaustion is particularly important in jobs in which the physical safety of the individual and others is at risk. It is critical for mission readiness among Department of Defense (DOD) personnel (Ouma, Chappelle, & Salinas, 2011). Indeed, mission readiness is at risk when personnel are emotionally exhausted.

With this report, we present two studies investigating antecedents of emotional exhaustion among DOD personnel. Both studies examine aspects of equal opportunity climate as predictors of emotional exhaustion. The first study focuses on the leader in terms of task-oriented leadership and leader equal opportunity behaviors and the unit in terms of unit cohesion. The results of this study suggest that being a good leader in terms of simply focusing on mission accomplishment is insufficient to prevent emotional exhaustion. The second study presents a conditional process model that describes a psychological process in which equal opportunity climate leads to emotional exhaustion indirectly through perceptions of organizational support. Hence, it describes *how* an equal opportunity climate impacts emotional exhaustion. In addition, the study identifies personality traits that determine for *whom* this process is most important.

## Study One

One way that scholars have suggested to address the problem of burnout, and exhaustion in particular, is through intervention by leaders. In addition to explicitly recognizing and addressing employee well-being, leaders may significantly influence subordinate exhaustion simply by fulfilling their leadership role by their leadership style of choice. In the present study, we build on recent research exploring the link between task-oriented leadership and the subordinate experience of exhaustion in efforts to inform leadership and stress theories and to offer implications for DOD leaders at all levels.

Task-focused or task-oriented leadership is a leadership style focusing on mission achievement (Colbert & Witt, 2009). Task-oriented leadership has been studied in conjunction with subordinate personality to understand its effects on subordinate performance and well-being. Initial research shows that some subordinates are better positioned to benefit from task-oriented leadership in terms of both performance and well-being because of inherent compatibility between task-oriented leadership behaviors and subordinate personality traits. For instance, subordinates who are high in conscientiousness may perform better and improve their well-being when working with a task-focused leader, largely because these subordinates are themselves goal-oriented (Colbert & Witt, 2009; Perry, Witt, Penney, & Atwater, 2010). In contrast, subordinates who are low in both conscientiousness and emotional stability may experience diminished well-being when working with a task-oriented leader (Perry et al., 2010). Building on this initial evidence of the personality moderators of task-oriented leadership, we focused attention on situational moderators of this leadership style.

Decades of research developing contingency leadership theory suggests that, in addition to subordinate characteristics, situational characteristics are important in determining the

appropriateness of specific leadership styles (House, 1996). One size does not fit all—either in terms of subordinates or situations. With the present study, we built upon this theoretical work by positioning two interpersonal aspects of the work environment as moderators of the task-oriented leadership-exhaustion relationship. Both moderators are thought to be highly predictive of the overall quality of work life for a subordinate, as they characterize the quality of everyday interpersonal interactions with leaders and coworkers and subsequent resource provision among individuals at work (Perry et al., 2010; Mullen, & Copper, 1994). First, we explored a relationship-oriented, stylistic aspect of a leader, leader equal opportunity behavior (LEOB), as a tone-setter that determines the way in which task-oriented leadership is delivered by the leader to subordinates. Together, task-oriented leadership and LEOB may determine the quality and quantity of resources delivered to subordinates by the leader. Next, we explored dynamics within the work environment—unit cohesion—as an indicator of social resources available from coworkers, which may also be necessary for task-oriented leadership and LEOB to positively affect subordinates in terms of well-being.

In exploring these interactions, we build on Perry et al.'s (2010) efforts to extend our knowledge of the nomological network of task-oriented leadership; we do so by focusing on situational factors that may play a role in determining the impact of task-oriented leadership on the well-being of DOD personnel. We also contribute to theory on well-being by further exploring the interactive effects of task-oriented leadership with other leader and coworker (i.e., situational) factors on emotional exhaustion.

### **Task-Oriented Leadership and Emotional Exhaustion**

Conservation of Resources (COR) Theory focuses on the importance of resources in helping individuals maintain their personal well-being. Briefly, it states that individuals are less

likely to experience exhaustion or other forms of strain (i.e., low well-being) if they have sufficient resources, if they do not perceive a threat to their current reservoir of resources, and/or if they receive satisfactory returns on their investment of resources (Hobfoll, 1989). These resources are often categorized as objects, conditions, energy, or personal characteristics (Hobfoll, 1989), but may be considered any tool that helps individuals pursue personal or professional goals and development and/or maintain personal well-being (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001).

Task-oriented leadership is a form of leadership in which the leader is very involved in providing resources, such as information, support, and motivation, to subordinates as they pursue work goals. Leaders may provide these valued resources through clear communication about high-priority goals, by providing guidance and assistance in reaching goals, and/or through encouragement to help subordinates stay focused on goals. By providing these resources, a task-oriented leader also reduces the need for subordinates to expend unnecessary cognitive resources in deciding what, how, and when to invest their energy, time, and attention (i.e., all valued resources) at work. Therefore, based on COR Theory, we predicted that task-oriented leadership would be generally negatively related to emotional exhaustion.

***Hypothesis 1-1.** Task-oriented leadership is negatively associated with emotional exhaustion.*

### **Leader Equal Opportunity Behavior as a Moderator**

As the leader is a vitally important person in the daily work life of a subordinate (Chemers, 2000), a range of leader behaviors beyond task-oriented behaviors may also matter in fostering subordinate well-being. Leader equal opportunity behavior (LEOB) refers to differential leader actions toward subordinates, based on demographic factors—gender, age, race/national

origin/color, religion, and disability. At one end of the continuum (low LEOB), leaders are discriminatory in not only making formal decisions affecting subordinates but also in interacting informally with them. At the other end, leaders make decisions and treat subordinates equally, without regard to demographic factors. We argue that leaders who discriminate based on demographic factors create a hostile work environment for all personnel, even those who might not be a target because of their demographic profile. Because LEOB determines the nature and tone of interpersonal interactions, we suggest that it also reflects relationship-oriented leadership behaviors more than task-oriented behaviors.

This idea is closely related to justice, which is the degree of fairness with which subordinates are treated (in terms of distributed outcomes, operating procedures, or interpersonal interactions; Colquitt, Conlon, Wesson, Porter, & Ng, 2001). A recent meta-analysis found a positive relationship between justice and various forms of psychological and physical well-being, including exhaustion (Robbins, Ford, & Tetrick, 2012). In this work, injustice was described as a job stressor that consumes resources and results in a condition of insufficient return on resource investment; both of these are consistent with COR Theory for prime conditions for burnout (Demerouti et al., 2001). The processes underlying the effects of LEOB on subordinate exhaustion are likely similar to justice because LEOB determines the degree of fairness of the leader toward subordinates, specifically based on demographics. Therefore, we predicted that LEOB would be negatively associated with exhaustion among subordinates.

***Hypothesis 1-2.*** LEOB is negatively associated with emotional exhaustion.

In addition to its main effects on exhaustion, LEOB also likely affects the task-oriented leadership-exhaustion relationship. Each of these leader behaviors (i.e., equal opportunity behavior and task-oriented behavior) occurs in conjunction with the other to determine the overall



leadership style. As LEOB reflects the fairness with which the leader formally and informally treats subordinates based on demographics (relationship-oriented leadership behaviors), it likely influences the effectiveness of task-oriented leadership in providing goal-oriented resources to the subordinate (task-oriented leadership behaviors).

In the case of a leader exhibiting high LEOB, task-oriented leadership is likely delivered in a discrimination-free manner, which subordinates likely experience as genuinely helpful and supportive in achieving their goals. In contrast, among subordinates whose leaders reflect bias in their interactions with them, high levels of task-oriented leadership are likely to yield angst among subordinates. Leader behaviors of this nature are likely to actually consume (rather than contribute to) subordinate emotional resources (Hobfoll, 1989). Just as any other relationship behaviors can enhance or undermine task behaviors among leaders and subordinates, we expected that LEOB is important in determining the impact of task-oriented leadership.

*Hypothesis 1-3.* LEOB moderates the negative relationship between task-oriented leadership and subordinate exhaustion, such that it is stronger among individuals reporting high rather than low LEOB.

### **Unit Cohesion as an Additional Moderator**

Interactions with coworkers are almost, if not equally, as important as supervisory relationships in determining the quality of one's daily work life. Unit cohesion describes the strength of social bonds with one's coworkers. Cohesion is often characterized as having three dimensions—interpersonal attraction (i.e., liking), task commitment, and group pride (Beal, Cohen, Burke, & McLendon, 2003). We focused on the interpersonal- and task-related dimensions because they are likely to have the greatest variability among DOD personnel.

We suggest that highly cohesive coworkers contribute to the individual's overall well-being through provision of social support resources for interpersonal and task issues (Hobfoll, 2001) and by meeting critical relatedness needs (Ryan & Deci, 2000). Namely, cohesion increases the effectiveness of collaboration, trust, and strength of friendships among coworkers, which all may act as social resources to help individuals pursue personal and professional goals and development and maintain personal well-being (Demerouti et al., 2001; Hunter, Perry, Carlson, & Smith, 2010).

***Hypothesis 1-4.*** Unit cohesion is negatively associated with emotional exhaustion.

Unit cohesion, as an interpersonal situational dynamic, likely also impacts the joint effects of task-oriented leadership and LEOB on exhaustion. As an indicator of social resources available in the work environment, largely from coworkers, cohesion may be another critical ingredient in fostering well-being. Even when leaders provide task- and relationship-oriented resources (in the form of task-oriented behaviors and equal opportunity behaviors), individuals may still require social resources from their peers to actually improve well-being as they face inevitable stress at work. Cohesion may represent critical task- and relationship-oriented aspects of the work environment, but instead of coming from leaders, these social resources come from peers (Hunter et al., 2010). When resources from any one source are lacking, well-being may suffer. But when all three sources of resources are available, well-being may actually improve as individuals enjoy a positive work environment (both in terms of leader and coworker interactions). Therefore, we posited that all three—task-oriented leadership, LEOB, and cohesion—are necessary to actually improve subordinate well-being.

***Hypothesis 1-5.*** Unit cohesion and LEOB jointly moderate the negative effect of task-oriented leadership on exhaustion, such that the task-oriented

leadership-exhaustion relationship is stronger among personnel reporting high levels of both unit cohesion and LEOB than it is among personnel reporting all other combinations of cohesion and LEOB.

### **Control Variables**

As demographic factors might influence perceptions of leadership and the experience of emotional exhaustion, we assessed and controlled for minority vs. non-minority status, age, hierarchical rank, and gender in the analyses.

## **Method**

### **Sample and Procedure**

Data were collected from 256 of approximately 425 (60%) uniformed United States Department of Defense personnel who were deployed in units outside the continental United States in non-combat zones. The commanding officers of the units sent memoranda to personnel requesting participation. Depending on the availability of access to the Internet, participants were provided with either a confidential unique access code with which to complete the survey online or paper copies of the surveys and response sheets. Of the 256, (a) 90% were enlisted personnel, and 10% were officers; (b) 77% were male, and 23% were female; and (c) 89% were in the Army, 8% were in the Marines, and 3% were in the Navy. The participants classified their races/ethnic backgrounds as follows: 58% white, 19% African-American, 15% Hispanic, 5% Asian, and <1% as Native-American or Alaskan Native. They classified their age categories as follows: 11% between 18 and 21 years, 44% between 22 and 30 years, 26.6% between 31 and 40 years, 16.4% between 41 and 50 years, and 2% over 50 years of age.

## Measures

**Emotional exhaustion.** The five-item (e.g., “I feel emotionally drained from our work”) exhaustion subscale of the Maslach Burnout Inventory-General Survey (MBI-GS; Maslach, Jackson, & Leiter, 1996) assessed emotional exhaustion. Participants answered using a 5-point response scale (1 = “Strongly Disagree” to 5 = “Strongly Agree”). High scores reflect high levels of emotional exhaustion.

**Leader equal opportunity behavior (LEOB).** Eight items from the Landis, Fisher, and Dansby (1988) Defense Equal Opportunity Management Institute Organizational Climate Survey measured LEOB. Each item (e.g., “When a person complained of sexual harassment, the leader said, ‘You’re being too sensitive’” and “A leader did not select a qualified subordinate for promotion because of his or her race/ethnicity”) assessed leader discriminatory behavior on a 5-point response scale (1 = “There is a very high chance that the action occurred” to 5 = “There is almost no chance that the action occurred”). High scores reflect favorable LEOB (i.e., low levels of discriminatory behavior).

**Task-oriented leadership.** We used Colbert and Witt’s (2009) 5-item (e.g., “This leader follows up to make sure the job gets done”) goal-focused leadership scale. Personnel rated their first-line leaders using a 5-point response scale (1 = “Strongly Disagree” to 5 = “Strongly Agree”). Because we anticipated that personnel are most influenced by their own perceptions of leader behaviors, subordinates reported their own potentially unique task-oriented leadership score for their leader (compared to other subordinates rating the same leader; Colbert & Witt, 2009). High scores reflect high levels of task-oriented leadership.

**Cohesion.** We measured unit cohesion with the four-item Landis, Dansby, and Faley (1993) unit cohesion scale. Following group cohesion research (George & Bettenhausen, 1990),

the items (e.g., “My unit works well as a team” and “Members of our work group really care about each other”) focused on both task and interpersonal dimensions of cohesion. The response scale ranged from 1 = “Totally agree with the statement” to 5 = “Totally disagree with the statement.” High scores reflect high levels of unit cohesion.

**Personality.** We used Goldberg’s (1999) Big Five factor markers in the International Personality Item Pool to measure emotional stability (e.g., “Am relaxed most of the time”) and conscientiousness (e.g., “Pay attention to details”). Each included three items and a 5-point scale (1 = “Very Inaccurate” to 5 = “Very Accurate”). High scores reflect high levels of emotional stability and conscientiousness, respectively. We used these variables as controls in the analyses, based on previous work exploring the importance of considering personality in conjunction with task-oriented leadership (Colbert & Witt, 2009; Perry et al., 2010).

**Demographic controls.** We also controlled for gender (female = 1 and male = 2), age (by categories listed above), and rank (1 = junior enlisted, 2 = mid-level enlisted, 3 = senior enlisted, 4 = command-level enlisted, 5 = junior officers, and 6 = senior officers). We expected that each of these may have some bearing on perceptions of and reactions to leadership behaviors and unit dynamics.

### **Statistical Analysis**

Because all constructs were measured using self-report, we first employed confirmatory factor analyses (CFA) to assess whether common method variance would have had substantial influence over the results before testing the hypotheses (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003; Williams, Cote, & Buckley, 1989). Specifically, we conducted a CFA with all items, allowing every item to load on its respective construct and on an uncorrelated latent variable (a method factor). The average variance explained by the method factor was 16 percent, which is less

than the 25 percent average reported in Williams et al. (1989). Moreover, the addition of the method factor from the baseline model (only the constructs) did not significantly improve model fit. Therefore, we believe the threat of common method bias for the study was no worse than previously published studies utilizing self-report data.

Before creating interaction terms, we first centered the predictors. We then utilized moderated hierarchical regression to test all hypotheses in a series of steps, which allowed us to discern the unique effects of each set of predictors on exhaustion.

### Results

We present correlations, descriptive statistics, and reliability estimates in Table 1. As shown there, task-oriented leadership ( $r = -.34, p < .01$ ), LEOB ( $r = -.21, p < .01$ ), unit cohesion ( $r = -.27, p < .01$ ), and emotional stability ( $r = -.48, p < .01$ ), were significantly related to emotional exhaustion, whereas conscientiousness ( $r = -.09, ns$ ), gender ( $r = -.01, ns$ ), age ( $r = -.11, ns$ ), and rank ( $r = -.03, ns$ ) were not.

Participants were clustered into workgroups by virtue of reporting to different leaders. Therefore, we conducted an Analysis of Variance to calculate the Intraclass Correlation (ICC[1]) to determine if this clustering influenced the results. At .06, the ICC(1) was above the .05 threshold. Accordingly, we conducted multilevel modeling (Proc MIXED in SAS) to test the hypotheses, the results of which we present in Table 2.

First, we created cross-product terms using centered predictors (Enders & Tofighi, 2007). At Step One, we entered emotional stability, conscientiousness, gender, age, and rank. Testing Hypothesis 1-1, we added task-oriented leadership at Step Two. As shown in Table 1, task-oriented leadership predicted emotional exhaustion ( $\beta = -.291, p < .01$ ). Testing Hypothesis 1-2 and 1-3, we added LEOB at Step Three and the task-oriented leadership x LEOB cross-product

term at Step Four, respectively. As hypothesized, both LEOB ( $\beta = -.215, p < .05$ ) and the task-oriented leadership x LEOB cross-product term predicted emotional exhaustion. Testing Hypothesis 1-4, we added unit cohesion at Step Five; it also predicted emotional exhaustion ( $\beta = -.147, p < .05$ ). We added the task-oriented leadership x unit cohesion ( $\beta = -.087, ns$ ) and LEOB x unit cohesion ( $\beta = -.003, ns$ ) cross-product terms at Step Six. Testing Hypothesis 1-5, we added at Step Seven the task-oriented leadership x LEOB x unit cohesion cross-product term; it also predicted emotional exhaustion ( $\beta = -.147, p < .05$ ).

We present in Figure 1 a graphical representation of the three-way interaction and the tests of simple slopes and slopes differences in Tables 3 and 4, respectively. As shown in Figure 1, the relationship between task-oriented leadership and emotional exhaustion was robustly negative among personnel who reported favorable levels of both LEOB and unit cohesion. Among these personnel reporting high levels of task-oriented leadership, emotional exhaustion levels were 128% in standard units lower than among those reporting low levels of task-oriented leadership. The simple slope for the high-LEOB and high-cohesion group was significantly different from zero ( $t = -6.62, p < .01$ , as shown in Table 3) and significantly different from the slopes (Table 4) of the other three groups—low-LEOB and low-cohesion, low-LEOB and high-cohesion, and high-LEOB and low-cohesion. Although the simple slope of the high-LEOB and low-cohesion group was significantly different from zero ( $t = -2.07, p < .05$ , a 39% difference in standard units between personnel reporting high vs. low levels of task-oriented leadership), it was not significantly different from the slopes of the other two groups, both of which were not significantly different from zero. In other words, the task-oriented leadership-emotional exhaustion relationship was moderate and negative among personnel who reported favorable levels of LEOB but low levels of unit cohesion but essentially non-existent among personnel who reported low levels of

LEOB. Not surprisingly, among personnel reporting high levels of task-oriented leadership, those also reporting low levels of both LEOB and unit cohesion expressed the highest levels of emotional exhaustion.

### **Discussion**

Not surprisingly, aspects of leadership style and unit cohesion independently predict emotional exhaustion. However, the key finding of the present study is that being a good leader in terms of simply focusing on mission accomplishment is insufficient to prevent emotional exhaustion. Indeed, situational characteristics are important in determining the appropriateness of specific leadership styles (House, 1996), as one size does not fit all (in terms of subordinates or situations).

Task-oriented leadership is a leadership style focusing on mission achievement. In contrast, LEOB is a relationship-oriented, stylistic aspect of a leader that acts as a tone-setter that affects the way in which task-oriented leadership is delivered by the leader to subordinates. Together, task-oriented leadership and LEOB determine the quality and quantity of resources delivered to subordinates by the leader. Clearly, one without the other either increases or fails to reduce emotional exhaustion. Anecdotal data reveal that many field commanders focus on the task but fail to appreciate that unfavorable equal opportunity behaviors can contribute to emotional exhaustion that undermines mission readiness and accomplishment of the mission.

However, leadership alone cannot prevent emotional exhaustion. Unit cohesion, which is an indicator of social resources available from co-workers, appears to be critical, as it is to effectiveness overall (Beal et al., 2003).



### **Strength and Limitations of the Present Study**

We emphasize three limitations of this study. First, we employed self-report methodology. Our confirmatory factor analyses indicated that common method variance probably did not bias our results any more than has been the case in previously published studies. Given this empirical evidence, the common practice of using self-report to assess these constructs (Diefendorff & Mehta, 2007; Halbesleben & Bowler, 2007; LeBlanc, Hox, Schaufeli, Wilmar, Peeters, & Taris, 2007), and the requirement for self-reports of these constructs from a conceptual standpoint (Lazarus & Folkman, 1984), we suggest, somewhat cautiously, that self-report provided the most relevant view of each construct. However, we still emphasize that a range of potential sources of variance in responses must be considered; these may have biased our results.

Second, the data were cross-sectional. Therefore, we cannot rule out the possibility that exhaustion affects how employees report on leadership style and unit cohesion. Clearly, replication with a longitudinal design would be of utility.

Third, we were not able to explicitly test the processes by which leadership style and unit cohesion relate to exhaustion. We encourage future researchers to explicitly examine the mechanisms by which leadership style and unit cohesion predict the development of exhaustion to shed light on which mechanism(s) may be dominant.

## Study Two

With Study One, we demonstrated that simply focusing on mission accomplishment (i.e., being effective at task-oriented leadership) is insufficient to prevent emotional exhaustion. Rather, task-oriented leadership behaviors accompanied by equal opportunity leader behaviors, together with a cohesive unit, are most likely to prevent emotional exhaustion. With the present study, we propose and test a psychological process in which equal opportunity climate leads to emotional exhaustion, directly and indirectly, through perceptions of organizational support. In so doing, we aim to (1) describe *how* an equal opportunity climate impacts emotional exhaustion and (b) identify two personality traits—conscientiousness and emotional stability—that determine for *whom* this process is most important.

Researchers have long observed the profound effect of shared perceptions of the work environment on relevant behavioral outcomes (Schulte, Ostroff, & Kinicki, 2006). An implicit assumption underlying the organizational climate literature is that aspects of an organization's climate affect organizational performance (Mayer, Ehrhart, & Schneider, 2009). Climate reflects the common consensus of individuals regarding the norms and values of the organization and works to channel individual behavior toward valued goals (James & Jones, 1974). In addition to the large overarching climate of an organization, more specific sub-climates may also exist (Schneider & Reichers, 1983), reflecting expectations for service, safety, innovation, equal opportunity, or diversity. Indeed, a growing literature has examined equal opportunity as an aspect of climate (Dansby & Landis, 1991).

### Equal Opportunity Climate

U.S. courts have identified two forms of workplace harassment. One is a hostile work environment, which refers to pervasive verbal and/or physical behavior that interferes with job

performance; the other is *quid pro quo*, which refers to the offer of a benefit in exchange for sexual conduct (Bell, McLaughlin, & Sequiera, 2002; Rotundo, Nguyen, & Sackett, 2001). In light of the growing diversity of uniformed DOD personnel, including an unprecedented number of female Service members involved in Operation Enduring Freedom and Operation Iraqi Freedom (Street, Vogt, & Dutra, 2009), attention to hostile work environments is timely and important.

Researchers investigating hostile work environments in military settings have predominantly done so under the rubric of equal opportunity (EO) climate (Dansby & Landis, 1998; Estrada, Stetz, & Harbke, 2007; Knouse & Dansby, 1999; Rosenfeld, Thomas, Edwards, Thomas, & Thomas, 1991). However, this construct has also been addressed outside of the military context by several researchers (Hooper, Miller, Topping, & Wells-Parker, 1989; Miller, Majors, Giesen, & Topping, 1990). DOD interest in equal opportunity initiatives was spurred by both the Civil Rights movement and the realization that diversity is a reality (Estrada et al., 2007). A form of psychological climate based on individual perceptions (James & Jones, 1974; Schneider & Reichers, 1983), EO climate refers to the presence of discrimination or harassment in the work environment (Dansby & Landis, 1991; Walsh et al., 2010). Although some researchers have focused primarily on racist behavior (McIntyre, Bartel, Landis, & Dansby, 2002), most work has focused on discrimination in terms of not only race/ethnicity but also age, religion, gender, and disability (Walsh et al., 2010).

Where is EO climate in the nomological net of constructs that reflect diversity-related issues affecting organizational culture? EO climate is distinct from perceived workplace discrimination and diversity climate. Whereas perceived workplace discrimination (Avery, McKay, & Wilson, 2008; Pavalko, Mossakowski, & Hamilton., 2003) assesses the extent to which individuals have personally experienced discrimination at work, EO climate assesses incidences of

discrimination and harassment that have occurred, regardless of the target (Walsh et al., 2010). Indeed, coworker or leader behaviors that are violent, offensive, or discriminatory can contribute to a hostile work environment, regardless of whether one is the target of such behaviors (Hulin, Fitzgerald, & Drasgow, 1996; Sorenson, Mangione-Lambie, & Luzio, 1998). Sorenson and colleagues (1998) found that both bystanders and victims of sexual harassment reported heightened negative affect and motivation loss. In addition to sexual harassment, perceived discrimination based on race, national origin, age, religion, disability, or sexual orientation can also contribute to a hostile work environment. Moreover, overt physical threats or any sort of behavior that causes undue stress upon the individual can contribute to hostile work environment perceptions. We argue that because measures of perceived workplace discrimination assess perceptions of the victims or targets of discriminatory behavior, research on EO climate is more generalizable. Diversity climate refers to “perceptions about the organization’s diversity-related formal structure characteristics and informal values” (Gonzalez & Denisi, 2009, p. 24). Whereas diversity climate assesses the extent to which individuals believe that the organization effectively leverages the strategic advantages of a diverse workforce (Mor Barak, Cherin, & Beckman, 1998), EO climate assesses the behaviors of co-workers and leaders with regard to policy-prescribed treatment of others. However, diversity climate may serve as an indicator of hostile work environments when low.

Much of the EO climate literature has focused on scale development and demographic differences in perceptions of EO climate (Estrada, Stetz, & Harbke, 2007; Truhon, 2008). Indeed, a challenge for researchers assessing EO climate is that many of the behaviors in question are subject to individual interpretation. Thacker and Gohmann (1993) observed, “sexual joking, touching and patting may be considered unwelcome sexual attention to some, but not to others” (p.

461). Hence, it is likely more appropriate to measure perceptions of these behaviors rather than to objectively count frequency of their occurrence when determining whether or not a hostile work environment is present. Studies looking at demographic differences have found that (a) uniformed female personnel are more likely to experience gender-based harassment than male personnel (Murdoch, Pryor, Polusny, & Gackstetter, 2007; Street, Gradus, Stafford, & Kelly, 2007; Vogt, Pless, King, & King, 2005); (b) women categorize social-sexual behaviors as harassment more often than men do (Konrad & Gutek, 1986; Martindale, 1991; Rotundo et al., 2001; Stockdale, Visio, & Batra, 1999); (c) racioethnic minorities feel more marginalized and excluded than non-minorities (Goldman et al., 2006); (d) uniformed women personnel are more likely than men to experience gender harassment (Lipari, Cook, Rock, & Matos, 2008; Rosen & Martin, 1998); and (e) racioethnic minorities expect to experience more discrimination than non-minorities (Levin, Sinclair, Veniegas, & Taylor, 2002). Of course, these differences in perception likely reflect that women and minorities are more likely to be the target of harassment and discrimination in the workplace (Avery et al., 2008).

Research examining the antecedents and outcomes of hostile work environments is important, given the host of deleterious outcomes associated with it (Willness, Steel, & Lee, 2007). For example, racioethnic discrimination yields decreased performance, psychological and physical health problems, and morale issues (Clark, Anderson, Clark, & Williams, 1999; Goldman, Gutek, Stein, & Lewis, 2006). Individuals experiencing sexual harassment report decreased mental and physical health, lowered job attitudes, and post-traumatic stress disorder symptoms; organizations with hostile work environments suffer financial losses stemming from absenteeism, lower performance, and turnover (estimated to have cost the federal government over 267 million dollars over two years; United States Merit System Protection Board [USMSPB],

1998; Jensen & Gutek, 1982; Fitzgerald, Drasgow, Hulin, Gelfand, & Magley, 1997; Willness et al., 2007). It is important to note that sexual harassment is not solely a problem for women (Rosen & Martin, 1998; Street et al., 2007).

Research has shown that both EO climate and perceived workplace discrimination yield unfavorable work-related outcomes (Bartle, Landis, & Dansby, 2002; Estrada et al., 2007; Firestone, 2007; Goldman et al., 2006; Pavalko et al., 2003; Walsh et al., 2010). However, to our knowledge, researchers have not yet applied a burnout-centric framework to explore the link between discrimination and burnout. With one exception (to our knowledge), the link between these discrimination-related constructs and facets of burnout remains unexamined. Perrewé, Brymer, Stepina, and Hassell (1991), measured burnout and age discrimination. However, they neither hypothesized a direct relationship between the two constructs nor provided an inter-correlation matrix; thus, they did not provide any empirical information about the relationship.

With the present study, we aimed to contribute to the literature by linking EO climate with emotional exhaustion and by exploring the psychological process by which the link operates. To do so, we identified competing hypotheses based on the Job Demands Resources (JD-R) model (Bakker, Demerouti, De Boer, & Schaufeli, 2003a; Demerouti, Bakker, Nachreiner, & Schaufeli, 2001; Schaufeli & Bakker, 2004) and Trait Activation Theory (Tett & Burnett, 2003) and then applied the Abridged Five-Dimensional Circumstance to identify how and for whom discrimination yields psychological strain.

### **The Psychological Process of Emotional Exhaustion**

As we mentioned in describing Study One, emotional exhaustion is a chronic state of diminished physical and emotional energy. Researchers have applied several theories to describe

how it comes about, including Hobfoll's (1989) conservation of resources theory, Karasek's (1979) demand-control model, and the JD-R model (Demerouti et al., 2001). These theories describe similar processes and have received considerable support (Brotheridge & Lee, 2002; De Rijk, Le Blanc, & Schaufeli, 1998). We base our arguments on the JD-R model because of its strong empirical backing (Bakker & Demerouti, 2007), its unique discussion of personal resources, and its flexibility in incorporating new constructs (Xanthopoulou et al., 2007).

Proponents of the JD-R theory discuss job demands and resources to describe a *dual* process at work. One is the motivational process (Bakker, Demerouti, & Euwema, 2005; Bakker, Demerouti, & Schaufeli, 2003b), which is how the intrinsically and extrinsically motivating nature of job resources assists individuals attempting to meet work goals. The other is the health impairment process (Bakker et al., 2005; Xanthopoulou et al., 2007), which is how job demands requiring physical or psychological effort lead to health problems and burnout. Empirical work has supported the theory-based descriptions of both processes (Bakker & Demerouti, 2007; Schaufeli & Bakker, 2004). We argue that the direct effects of EO climate on emotional exhaustion likely operate as a function of the impaired health process and that the indirect effects of EO climate likely operate as a function of both the impaired health and motivational processes.

### **Job Demands**

The JD-R model categorizes risk factors for strain into job demands and job resources (Bakker & Demerouti, 2007). Demands are "physical, psychological, social, or organizational aspects of the job that require sustained physical and/or psychological (cognitive and emotional) effort or skills" (Bakker & Demerouti, 2007, p. 312). Some job demands, such as work pressures and emotionally taxing interactions, are not necessarily negative in nature. However, they might function as work stressors because they require individuals to expend emotional effort to meet the

demands (Meijman & Mulder, 1998). They function similarly to what scholars writing in the stressor-strain literature (Beehr, Jex, Stacy, & Murray, 2000) refer to as *work stressors*, as they might lead to job-related strain. Whether self- or other-reported, job demands predict burnout (Demerouti et al., 2001).

We suggest that EO climate is a job demand within the context of the JD-R model. A favorable EO climate does not necessarily provide resources, per se. In contrast, an unfavorable EO climate likely reduces resources. When the EO climate indicates that discrimination in the work environment is present, it functions as an emotional demand driven by perceptions of injustice. These perceptions of injustice are stressful (Judge & Colquitt, 2004). Walsh et al. (2010) examined the relationship between EO climate and strain. However, they measured strain as a type of job-related anxiety with statements like “my job gets to me more than it should.” Emotional exhaustion is a chronic and severe state of depleted physical and emotional energy (Maslach, 2003) that is considerably more serious than anxiety at work. Accordingly, based on the tenets of the JD-R model and prior empirical findings, we propose:

***Hypothesis 2-1:*** An unfavorable EO climate is positively related to emotional exhaustion.

### **Job Resources**

To further understand why this relationship may occur, we leverage the resources component of the JD-R model in combination with Organizational Support Theory (Eisenberger, et al., 1986) and Trait Activation Theory (Tett & Burnett, 2003) to explain how low levels of EO climate may be associated with decreased perceptions of perceived organizational support (POS), which in turn yield emotional exhaustion. In contrast to job demands, job resources are “physical, psychological, social, or organizational aspects of the job” that can help achieve work goals, buffer



the associated psychological and physiological costs of job demands, and facilitate personal development (Bakker & Demerouti, 2007, p. 312). Reflected in such constructs as social support and autonomy, job resources have been considered more theoretically relevant to motivational processes and work engagement than to emotional exhaustion and other negative strains (Bakker & Demerouti, 2007). Research linking resources such as autonomy, feedback, and supervisory coaching to engagement supports this idea (Bakker, Demerouti, & Euwema, 2005). However, predictions based on the JD-R model are not limited to simple main effects among organizational-type resources.

A recent expansion of the JD-R model used personal resources (e.g., self-efficacy) as mediational components to help explain how job resources relate to emotional exhaustion and engagement (Xanthopoulou et al., 2007). This novel approach was the result of previous empirical work that suggested resources can facilitate the psychological capital of individuals (Luthans, Avey, Avolio, Norman, & Combs, 2006). Hence, as Xanthopoulou et al. (2007) described, job resources can also serve as antecedents of personal resources (Judge, Locke, & Durham, 1997), which in turn mediate the relationship between job resources and exhaustion/engagement.

In the current study, we continue to expand the JD-R model by suggesting that job demands can also influence perceptions of job resources. We are unaware of any study that has examined this potentially important connection. Like Xanthopoulou et al. (2007), we leverage prior empirical evidence to explain that demands may actually influence work resources, which when low, may act as powerful psychological stressors. However, before doing so, we first describe the concept of POS, explain its relevance in relation to EO climate, and position it as a job resource within the JD-R framework.

## **Perceived Organizational Support**

According to advocates of organizational support theory (Eisenberger et al., 1986), individuals form perceptions about the extent to which the organization cares about their well-being and values their contribution. They do so in order to ascertain the organization's willingness to reward hard work and support socio-emotional needs. This process is critically important, given that POS can directly and indirectly influence individuals' attitudes and behaviors at work. Specifically, empirical studies have found that POS is related to a multitude of outcomes, including performance, job-related affect (e.g., organizational commitment), strain, and withdrawal behavior (Rhoades & Eisenberger, 2002).

Underlying this process are two well-supported theories. Social exchange theory suggests that individuals are constantly evaluating the worth of relationships based on the perceived costs and rewards associated with each particular relationship (Blau, 1964). The norm of reciprocity suggests that favorable treatment is rewarded in kind (Gouldner, 1960). Thus, individuals that perceive favorable treatment by another party are more likely to treat that party favorably in return.

Organizational support theory expands upon these basic tenets by describing how individuals tend to assign humanlike characteristics to organizations (Rhoades & Eisenberger, 2002). In particular, the actions of organizational agents are said to influence individuals' perceptions about the organization's intent instead of being attributed exclusively to the personal motives of the agent alone. Together, organizational support and social exchange theories suggest that the degree to which individuals feel the rewards of being an organizational member outweigh the costs is critical in determining the perceived value or worth of the work situation (Rhoades & Eisenberger, 2002; Blau, 1964). In line with the norm of reciprocity, organizational support theory

further predicts that individuals who perceive a high-value relationship with the organization are more likely to exhibit desirable work-related attitudes and behavior in an attempt to give back what they receive.

We suggest that the EO climate influences perceptions regarding how the organization supports its personnel. Because perceptions of support are driven by the actions of organizational agents that are attributed to the organization itself, when individuals or supervisors in the work environment engage in discriminating behavior, those around them may form the impression that the organization does not support or value any individuals—not just those being discriminated against. To our knowledge, the notion that demands influence perceptions of support (i.e., a resource) has not been discussed by JD-R theorists. However, empirical findings tested under the JD-R model have found small, significant, negative correlations between such demands as emotional needs and such resources as social support (Xanthopoulou et al., 2007). Considering these findings and evidence from the POS literature suggesting that such demands as physically or emotionally challenging work environments lead to decreased perceptions of POS (Coyle-Shapiro & Conway, 2005), the current study is well-positioned to explore how the relationship between EO climate and emotional exhaustion might be explained by POS. Hence, we describe below how POS might be thought of as a resource that directly relates to strain.

For two reasons, support in general is considered a resource by the JD-R model. First, in relation to the motivational process of the JD-R, perceptions of support can foster a willingness to focus energy on and be engaged with the work environment. This direct effect of support on engagement is supported by both JD-R-centric studies using such variables as social support as well as studies focusing specifically on POS (Saks, 2006; Xanthopoulou et al., 2007). Second, in relation to the health impairment process, researchers have argued that support is a resource

because it helps individuals handle job demands that may otherwise lead to burnout. This classical buffering hypothesis has also been supported by both JD-R and POS literatures that report the impact of demands on strain and is moderated by supportive resources (Bakker & Demerouti, 2007; George, Reed, Ballard, Colin, & Fielding, 1993; Leather, Lawrence, Beale, & Cox, 1998).

However, beyond these commonly-discussed means in which support can operate in the JD-R model, prior findings suggest that support may also directly impact strain. Hence, in addition to operating as a predictor of engagement and a buffer of demands, a lack or loss of resources causes individuals to experience strain (Hobfoll, 1989, 2002). Because individuals struggle to protect valuable resources, a perceived or actual loss of resources can be stressful (Hobfoll, 2002), independent of job demands. This notion is not typically discussed in relation to the JD-R model, but studies in the area have provided evidence that resources, such as support, are negatively correlated with exhaustion (Xanthopoulou et al., 2007). Similarly, examinations of POS outside of the JD-R model have often proposed that POS has a direct effect on psychological strains, including burnout and fatigue (Cropanzano, Howes, Grandey, & Toth, 1997).

Given the aforementioned theoretical and empirical evidence that EO climate may influence the extent to which individuals feel the organization is supportive, and POS may in turn directly relate to the experience of psychological strain, we suggest that an unfavorable EO climate reduces perceptions of organizational support, which then leads to increased emotional exhaustion. In other words, some of the effect of EO climate on emotional exhaustion is indirect through POS. As argued above, an unfavorable EO climate contributes to a general sense that the organization does not value its personnel.

However, for at least two reasons, some of the effect of EO climate on emotional exhaustion is likely direct. First, according to the health impairment process of the JD-R model,

the physical and psychological efforts needed to combat work demands are directly related to burnout (Bakker & Demerouti, 2007). Practically, this means that individuals who observe discriminating behavior or are directly discriminated against may experience such emotional duress over time that it leaves them emotionally exhausted, regardless of the level of support in general that they perceive. Second, POS does not fully capture other variables that may mediate the link between EO climate and emotional exhaustion. As noted by Walsh et al., (2010), an unfavorable EO climate may result in perceptions of procedural or distributive injustice/unfairness (Folger & Greenberg, 1985; Colquitt et al., 2001), which may, in turn, lead to job-related anxiety or strain. Similarly, it is possible that other types of supportive resources studied frequently by the JD-R model (e.g., social support and co-worker support) would act as mediators (Bakker & Demerouti, 2007). Moreover, whereas EO climate captures behaviors by both co-workers and agents of the organization (i.e., formal leaders), POS is an organization-centric construct. Hence, some of the effect of EO climate on emotional exhaustion is likely direct.

*Hypothesis 2-2:* POS is negatively related to emotional exhaustion.

*Hypothesis 2-3:* The effect of EO climate on emotional exhaustion is both direct and indirect through POS.

### **Personality as a Personal Resource**

In offering the Hypothesis 2-3, we attempted to explain *how* EO climate impacts emotional exhaustion. However, a complete understanding of the psychological process linking EO climate and emotional exhaustion likely requires some understanding of for *whom* this process is most relevant. Hence, we described the role of personal resources in shaping how individuals appraise and react to stressors resulting from high-demand and/or low-resource situations.

According to the JD-R model, individuals have varying levels and types of “personal resources” (Xanthopoulou et al., 2007). Personal resources are distinct from job resources. Whereas personal resources are brought to the job by the individual, job resources are provided to the individual by the job (Bakker, 2008). Personal resources are used to invest, manage, and direct other resources, such as energy and time (Hobfoll, 2001). These personal resources are “aspects of the self” that reflect resiliency (Hobfoll, Johnson, Ennis, & Jackson, 2003; Xanthopoulou et al., 2007, p. 123). Thus, they capture the extent to which individuals believe they can successfully control and impact their environment (Hobfoll, et al., 2003). Previous empirical work suggests that individuals with high levels of personal resources, such as self-efficacy (Van Yperen & Snijders, 2000), organizational based self-esteem (Pierce & Gardner, 2004), and optimism (Mäkikangas & Kinnunen, 2003), are less likely to experience physical and psychological strain in response to job demands. As a result, recent advances of the JD-R model (Xanthopoulou et al., 2007) have proposed that personal resources theoretically operate in a manner similar to job resources insofar as they are capable of buffering the impact of demands on exhaustion.

Although some research has failed to find significant evidence supporting the moderating role of personal resources within the JD-R framework (Xanthopoulou, et al., 2007), additional exploration of this area is warranted for two reasons. First, only a few studies have tested the assumption that personal resources can buffer the impact of demands on exhaustion (Xanthopoulou, Bakker, Demerouti, & Schaufel, 2009; Xanthopoulou, et al., 2007). Second, these studies tend to focus exclusively on non-trait based, individual personal resources, such as self-efficacy, (Xanthopoulou, et al., 2007). Some scholars have described personality traits as personal resources that equip individuals to manage workplace demands in specific ways (Halbesleben, Harvey, & Bolino, 2009; Perrewé & Spector, 2002; Spector, 2003).

Theoretical models of stress have not yet identified which personality characteristics are resources and under what circumstances these characteristics influence strain. Tenets of Trait Activation Theory (Tett & Burnett, 2003) may shed light on how and when personality may affect strain. According to advocates of this theory, when situations allow for variance in behavior, the situation triggers activation of specific personality characteristics. That is, when cued traits are present, they are likely activated. However, when an individual does not possess cued traits, the traits cannot be activated. It may very well be that personality characteristics do not provide personal resources, *per se*, but rather influence behavior when activated by situational cues. Before further discussing Trait Activation Theory, we briefly discuss the five-factor model of personality.

Barrick et al. (2001) described 20th-century research on the relationships between personality and job performance as having two phases. In the first phase, which ended in the mid-1980s, researchers produced primary studies that examined relationships between job performance and individual scales from a wide variety of personality instruments. Barrick et al. (2001) concluded that the outcome of those eight decades of research was that personality and job performance were not meaningfully related across situations. In the second phase, which began in the mid-1980s, the five-factor model of personality—the “Big Five” (Goldberg, 1992)—was applied to selection research, and meta-analysis was employed to summarize the relationships between the five personality factors and job performance across studies.

The Big Five model of personality is based on a factor analysis approach to personality; that is, personality items have principal loadings on one or another of the highest-level factors. With some exceptions (Block, 1995; Eysenck, 1992), a consensus among personality psychologists developed five basic personality factors that best represent the structural framework of personality (Digman & Takemoto-Chock, 1981; Fiske, 1949; Goldberg, 1992; John &

Srivastava, 1999; McCrae & Costa, 1999; Norman, 1963; Wiggins & Trapnell, 1997). It is the Big Five model that has received most of the attention in the organizational science literature (Barrick et al., 2001). The criterion-related validity of the Big Five in predicting job performance (Mount & Barrick, 1998) and other work outcomes, such as career success (Judge, Higgins, Thoreson, & Barrick, 1999), has been well documented.

Saucier and Goldberg (2001) noted that the factors are typically labeled extraversion (Factor I), agreeableness (Factor II), conscientiousness (Factor III), emotional stability (Factor IV), and intellect (Factor V). Alternative labels for Factor I have included surgency (Goldberg, 1992), sociability (Hogan & Hogan, 1992), and confident self-expression (Fiske, 1949). Alternatively, Factor II has been labeled social adaptability (Fiske, 1949), friendly compliance (Digman & Takemoto-Chock, 1981), and likability (Hogan & Hogan, 1992). Alternative labels of Factor III include conformity (Fiske, 1949), will to achieve (Digman & Takemoto-Chock, 1981), and prudence (Hogan & Hogan, 1992). Factor IV's alternative labels include neuroticism (inflected; McCrae & Costa, 1985), adjustment (Hogan & Hogan, 1992), ego strength (Digman & Takemoto-Chock, 1981), and emotional control (Fiske, 1949). In the organizational science literature, Factor V has primarily been referred to as openness to experience (McCrae & Costa, 1985). However, it has also been labeled autonomy (Hendriks, Hofstee & de Raad, 1999), imagination (Goldberg, 1993; Saucier, 1992), culture (Norman, 1963; Tupes & Christal, 1961), and Intellectance (Hogan & Hogan, 1992).

Barrick et al. (2001) cited 15 meta-analytic studies of the personality–performance relationship and concluded that conscientiousness and emotional stability are the most consistent predictors of work outcomes across jobs among the Big Five dimensions. Hurtz and Donovan (2000), however, argued that some previous validity estimates were overestimates. Arthur, Woehr,



and Graziano (2001) argued that reliance on the simple factor-structure analyses of personality has led to a loss of precision in measurement and a corresponding error in prediction. They noted that “global, broad-brush dimensions like those assessed by the five-factor approach contain meaningful subgroups that cross dimensional boundaries, and these may differ in important ways” (p. 10). Therefore, it seems prudent to consider the joint effects of conscientiousness and emotional stability as personal resources that affect strain. The interpersonal circumplex provides a theory-based approach to do so.

The interpersonal circumplex is an alternative to the factor analysis approach to personality. It presents traits along angular positions in a two-dimensional factor space. “Because any rotation is as good as another” (Wiggins & Trapnell, 1997, p. 748), the circumplex model designates no optimal orientation of the principal axes of the circumplex. Hofstee et al. (1992, p. 146) commented that circumplex models provide “much more opportunity for identifying clusters of traits that are semantically cohesive.” Hence, they permit fine-grained personality descriptions (Becker, 1999). Scoring of the facets has been used for interpretation by professionals or for customer feedback. However, because facet scores add no additional variance over-and-above what is explained by the five traits (Hofstee, Ten-Berge, & Hendriks, 1998), selection practitioners and researchers have paid little attention to circumplex models.

Twenty years ago, Hofstee et al. (1992) observed that the existing circumplex models were missing at least two of the five general personality factors and thus did not capture all of the trait space. Hence, they proposed an integration of the Big Five and circumplex models. Aware of the limitations of operationalizing a full five-dimensional circumplex, they proposed the Abridged Five-Dimensional Circumstance (AB5C). It features 10 two-dimensional circumplexes that consider all possible pairs of the Big Five traits as coordinates. The facets are presented reflecting

their two highest-factor loadings. That is, each trait is characterized in terms of its loadings on a subset of two of the five factors at a time. Johnson and Ostendorf (1993) presented a revision of the AB5C in an attempt to resolve some disputes as to the location of some specific attributes (e.g., ambition) within the Big Five.

Barrick, Mount, and Judge (2001) and Hertz and Donovan (2000) identified the AB5C as a useful guide for grouping facets of the Big Five in order to create optimal composites of the Big Five traits. Despite the passing of two decades since Hofstee et al. (1992) introduced the AB5C, it has received little empirical attention among organizational scientists. As the AB5C provides a theoretical framework for examining multiplicative (i.e., interactive) relationships among personality variables, we suggest that the AB5C permits us to consider emotional stability and conscientiousness together and describe how they might act as personal resources that influence the direct and indirect effects of EO climate on emotional exhaustion. First, we briefly discuss emotional stability and conscientiousness.

### **Emotional Stability**

Emotional stability refers to the extent to which individuals are secure, relaxed, and unemotional (Judge & Bono, 2001). Emotionally unstable individuals are at the opposite pole of the trait and are typically insecure, anxious, fearful, and easily upset (Hough & Ones, 2002). JD-R research has acknowledged the importance of emotional stability in relation to burnout (Langelaan, Bakker, Lorenze, Van Doornen, & Schaufeli, 2006) but has yet to explore potential moderating and mediating mechanisms that may help explain this relationship. Accordingly, we leverage work in personality and social psychology to argue that two key processes inherent to stressor-strain relationships suggest that emotional stability might be an important factor in the psychological process linking EO climate with emotional exhaustion. The first factor focuses on

how stressful situations are appraised/perceived, and the second deals with how individuals react to stressful situations (Bolger & Zuckerman, 1995). We suggest that together, these processes position us to describe how emotional stability moderates the direct and indirect effects of EO climate on emotional exhaustion.

First, before any demand is considered stressful, individuals engage in a stress appraisal process (Lazarus, 1991; Lazarus & Folkman, 1984). Formally referred to as *differential exposure* (Bolger & Zuckerman, 1995), scholars assert that stressors are “in the eye of the beholder” (Kammeyer-Mueller, Judge, & Scott, 2009, p. 179). This is important because it suggests that individual differences influence the appraisal of situations (Blascovich & Tomaka, 1996; Vollrath & Torgersen, 2000). In practical terms, this means that emotionally unstable persons are likely to become emotionally exhausted more easily and more often than their emotionally stable counterparts (Bakker, Van Der Zee, Lewig, & Dollard, 2006; Cano-Garcia, Padilla-Muñoz, & Carrasco-Ortiz, 2005; Lepine, Lepine, & Jackson, 2004; Maslach & Leiter, 2008; Mills & Huebner, 1998; Zellars, Hochwarter, Perrewé, Hoffman, & Ford, 2004) because they (1) see many, if not most circumstances as stressors (Bolger & Zuckerman, 1995), (2) exaggerate perceptions of job stressors (Brief, Burke, George, Robinson, & Webster, 1988; Spector, Jex, & Chen, 1995; Spector, Zapf, Chen, & Frese, 2000), (3) see the environment as more threatening (Bar-Haim, Lamy, Pergamin, Bakermans-Kranenburg, & van IJzendoorn, 2007; Schneider, 2004), (4) generally have pessimistic appraisals of the environment (Chang, 1998; Smith, Pope, Rhodewalt, & Poulton, 1989), and (5) ruminate about potentially stressful situations (Nolan, Roberts, & Gotlib, 1998; Muris, Roelofs, Rassin, Franken, & Mayer, 2005).

The second stress process is *differential reactivity* (Bolger & Zuckerman, 1995). Occurring after the *differential exposure* process, *differential reactivity* suggests that individual differences

dictate the manner in which individuals respond to or attempt to cope with stressful situations. Simply put, compared to individuals high in emotional stability, emotionally unstable persons cope less efficiently and effectively. Coping refers to the “constantly changing cognitive and behavioral efforts to manage specific external and/or internal demands that are appraised as taxing” (Lazarus & Folkman, 1984, p. 141). Scholars have identified three types of coping: problem-solving, emotion-focused, and avoidance coping (Folkman & Lazarus 1980; Kammeyer-Mueller et al., 2009; Long, 1990; Parkes, 1990). Problem-solving coping refers to strategies that identify stressors and engage in specific behaviors intended to mitigate stress-producing problems. This type of coping is typically viewed as a positive coping strategy that is capable of reducing prolonged strain (Folkman, 1984; Higgins & Ender, 1995). Emotion-focused coping involves strategies to reduce strain without actually affecting the presence of stressors. Avoidance coping focuses on distracting processes in which individuals attempt to avoid the problem altogether or use alcohol or drugs to distract themselves from the stressful situation (Billings & Moos, 1981). Avoidance coping is considered the most maladaptive and yields chronic strain (de Jong & Emmelkamp, 2000; Parasuraman & Cleek, 1984). Work building on Bolger and Zuckerman’s (1995) *reactivity model* has revealed that emotional stability is strongly related to avoidance coping (Kammeyer-Mueller et al., 2009).

According to the JD-R model, personal resources are aspects of the self that are capable of reducing the psychological costs imposed by demands. Emotional stability might operate as a buffering resource. The buffering process is thought to act on the relationship between demands and strain (Bakker & Demerouti, 2007). Hence, we might expect emotional stability to moderate the direct effect of EO climate on emotional exhaustion. Compared to persons high in emotional stability, emotionally unstable individuals are likely to be more sensitive to discriminating

behavior (i.e., see it first or see it when others do not), be more bothered by it, and cope with it less effectively. In contrast, high levels of emotional stability may provide resources to permit individuals to withstand an unfavorable EO climate and therefore not develop emotional exhaustion. In other words, although an unfavorable EO climate would be a job demand/stressor for them, their emotional stability reserves would prevent them from developing full-blown emotional exhaustion. Accordingly, we would anticipate that the relationship between EO climate and emotional exhaustion would likely be stronger among persons low rather than high in emotional stability. This logic is consistent with JD-R theory.

However, given the strong main effect of emotional stability on emotional exhaustion, we might also argue the opposite—the relationship between EO climate and emotional exhaustion would likely be stronger among persons high rather than low in emotional stability. Given that the evidence described above suggests that emotional stability is associated with an individual's perception of stress independent of the actual level of stressors (Kammeyer-Mueller, et al., 2009), perhaps persons low in emotional stability are emotionally exhausted, even in a work environment with relatively low levels of discriminatory behavior. Indeed, emotionally unstable people are likely to experience, if not create, problems and ruminate about them with almost unwavering consistency. Hence, they are likely to be emotionally exhausted or be approaching emotional exhaustion much of the time. In contrast, persons high in emotional stability are likely to experience emotional exhaustion when they actually perceive an unfavorable work environment. If so, the relationship between EO climate and emotional exhaustion would likely be stronger among persons high rather than low in emotional stability, and emotional stability would not operate as a buffer.

Rather than attempt to resolve these competing notions, we later argue that conscientiousness should be considered in the mix. Before doing so, however, we consider the possible impact of emotional stability on the effect of EO climate on POS and on the effect of EO climate on emotional exhaustion through POS. Previously, we mentioned that the buffering process is thought to act on the relationship between demands and strain (Bakker & Demerouti, 2007). We suggest that personality traits, whether or not they act as resource-providing buffers, likely impact the links between demands (EO climate) and job resources (POS) and, therefore, the effect of demands on emotional exhaustion through job resources. Low levels of resources (e.g., POS) act as stressors in their own right (Bolger & Zuckerman, 1995; Spector et al., 1995). It is likely that an unfavorable EO climate yields a threat of resource loss (situational cue) that lowers POS, which then yields the perception of fewer available resources and, therefore, increases emotional exhaustion. Again, the question is whether (a) persons low in emotional stability are more sensitive to this process, such that the relationships are stronger among persons low rather than high in emotional stability or (b) persons low in emotional stability are chronically near or at emotional exhaustion and perceive problems that others do not, such that the relationships are stronger among persons high rather than low in emotional stability.

### **Conscientiousness**

Conscientious individuals often have long-term plans, technical expertise, and an organized support network (McCrae & Costa, 1999). They maintain socially-prescribed impulse control (e.g., delaying gratification, planning, prioritizing, thinking before acting, and following rules and norms) that yields effective task performance (John & Srivastava, 1999). These tendencies predispose individuals to direct their abilities, energy, and other resources toward achieving work-related goals, observe inconsistencies in their environment and act to resolve

them, and proactively and efficiently complete tasks (Witt, Burke, Barrick, & Mount, 2002). Of the Big Five personality traits, conscientiousness is the best predictor of a spectrum of work-related outcomes, including job performance (Barrick, Mount, & Judge, 2001; Costa & McCrae, 1988). Meta-analytic studies also indicate the presence of moderators of the conscientiousness-job performance relationship (Barrick & Mount, 1993; Barrick, Mount, & Strauss, 1993; Gellatly, 1996). This suggests that the impact of conscientiousness on work-related outcomes might be a function of not only the environment but perhaps also other personality traits.

Scholars have described conscientiousness as a motivation-based trait. It influences performance through other motivational constructs, including goal-setting, expectancy, and self-efficacy (Judge & Ilies, 2002; Schmidt & Hunter, 1992). In addition, both Blickle et al. (2008) and Witt and Ferris (2003) conceptualized conscientiousness in terms of the “getting ahead” aspect of political skill, representing a dispositional willingness to exert energy toward accomplishment in the workplace. Together, these findings and conceptualizations suggest a positive relationship between conscientiousness and the tendency to act on relevant environmental cues at work.

Recent work suggests that conscientiousness acts as a personal resource by determining the efficiency of resource expenditure (Halbesleben et al., 2009). In other words, it determines the extent to which individuals appropriately direct attentional resources toward tasks and problems. Hence, it also influences the propensity to avoid strain (Bakker, 2008; Connor-Smith & Flachsbart, 2007; O’Connor & O’Connor, 2004; Xanthopoulou et al., 2007; Zellars et al., 2006). Individuals high in conscientiousness primarily use problem-focused coping strategies (Connor-Smith & Flachsbart, 2007), which buffer the negative effects of job demands or lack of resources (Baker & Berenbaum, 2007). Moreover, empirical work on each dimension of conscientiousness (i.e., achievement-, detail-, and planning-orientations) has revealed that these

specific traits may allow individuals to avoid extensive rework, thereby conserving resources (Hobfoll, 2001; Zellars et al., 2006).

Hence, we might expect conscientiousness to moderate the direct and indirect effects of EO climate on emotional exhaustion. On one hand, the relationship between EO climate and emotional exhaustion could be stronger among persons low rather than high in conscientiousness because conscientiousness provides resources (e.g., planning, problem-solving, and overall effective approaches to coping) that buffer the impact of an unfavorable EO climate. This logic seems consistent with JD-R theory and the notion that personality traits provide resources.

On the other hand, the relationship between EO climate and emotional exhaustion could be stronger among persons high rather than low in conscientiousness. In the lexicon of Trait Activation Theory, we suggest that an unfavorable EO climate is likely not a situational cue for persons low in conscientiousness because they probably do not care about an unfair work environment, or at least not as much as do the highly conscientious. As low-conscientiousness people may only care about the EO climate when it affects them directly, an unfavorable EO climate would have relatively less impact on their perceptions of POS and feelings of emotional exhaustion. This logic is consistent with Trait Activation Theory but contrary to JD-R theory and the notion that personality traits provide resources.

With no clear path to derive unambiguous expectations, we turn to considering the joint effects of conscientiousness and emotional stability. In doing so, we apply the AB5C to develop our moderated mediation hypothesis.

### **Emotional Stability × Conscientiousness**

Many adjectives have been used to illustrate the AB5C facets (Hofstee et al., 1992; Johnson & Ostendorf, 1993). Low-emotional stability, low-conscientiousness individuals can be



described as fickle, impractical, weak-willed, unstable, chaotic, inaccurate, scatterbrained, confused, erratic, irrational, discontented, subjective, and vulnerable. In contrast, low-emotional stability, high-conscientiousness individuals are overanxious, worrisome, concerned, nervy, and tearful. The high-emotional stability, low-conscientiousness individuals are carefree, thick-skinned, slippery, laconic, and unconcerned. In sharp contrast, high-emotional stability, high-conscientiousness individuals are resolved, determined, perseverant, strong-willed, well-advised, systematic, purposeful, and exact. Examining the emotional stability  $\times$  conscientiousness interaction would permit an assessment of how these facets of the AB5C influence the impact of EO climate on emotional exhaustion when using conventional Big Five measures.

By considering them together, the AB5C provides a path for identifying the likely joint effects of conscientiousness and emotional stability on the psychological process we have articulated. Accordingly, we refer to each combination of conscientiousness and emotional stability to describe their joint effects.

**Low-emotional stability, low-conscientiousness.** The scatterbrained low-emotional stability, low-conscientiousness individuals probably are sensitive to EO climate and POS levels in the environment (low emotional stability) but simultaneously relatively inattentive to details in it (low conscientiousness). In effect, the low conscientiousness levels essentially cancel out the activation of low emotional stability. Hence, we expected that the direct and indirect effects of EO climate on emotional exhaustion are relatively weak among these persons. Moreover, because of their low emotional stability and few conscientiousness-based resources available to cope effectively, we anticipated that these individuals are relatively high in emotional exhaustion most of the time.

**Low-emotional stability, high-conscientiousness.** The overanxious low-emotional stability, high-conscientiousness individuals probably are probably both sensitive to EO climate and POS levels in the environment (low emotional stability) and very attentive to details in it (high conscientiousness). Hence, we expected that the direct and indirect effects of EO climate on emotional exhaustion are moderate-to-strong among these persons. In addition, because of their low emotional stability, we anticipated that these individuals are relatively high in emotional exhaustion, even in a favorable EO climate, such that their emotional exhaustion levels increase to even higher levels as the EO climate becomes increasingly unfavorable. Indeed, among these persons, the threat of or actual loss of resources is an activation cue.

**High-emotional stability, high-conscientiousness.** The resolved high-emotional stability, high-conscientiousness individuals probably are likely very attentive to EO climate and POS levels in the environment (high conscientiousness). Because they care and likely see an unfavorable EO climate as a monkey wrench thrown into the work environment, these persons likely question the organization (low POS) when observing an unfavorable EO climate, and therefore, experience increased emotional exhaustion. In other words, whereas they likely experience relatively low emotional exhaustion when the EO climate is favorable, it is likely that their levels of emotional exhaustion approach those of their emotionally unstable counterparts when the EO climate is unfavorable. Hence, we expected that the direct and indirect effects of EO climate on emotional exhaustion are moderate among these persons. We did not expect the relationships to be highly robust, because this combination of emotional stability and conscientiousness likely provides some personal resources with which to cope with the perceptions of diminished job resources.

**High-emotional stability, low-conscientiousness.** The unconcerned high-emotional stability, low-conscientiousness individuals probably are relatively insensitive to EO climate and POS levels in the environment. Simply put, they are fine, and they do not care. Consequently, we expected that the direct and indirect effects of EO climate on emotional exhaustion are very weak among these persons. Moreover, because of their high emotional stability, we anticipated that these individuals are relatively low in emotional exhaustion most of the time, almost regardless of the favorableness of the EO climate. Hence, unlike people in the other three combinations of conscientiousness and emotional stability, these individuals are likely to experience substantially lower levels of emotional exhaustion when reporting an unfavorable EO climate.

Consistent with the arguments presented above, we proposed:

*Hypothesis 2-4a.* The direct effect of EO climate on emotional exhaustion is jointly moderated by emotional stability and conscientiousness. Specifically, the relationship is moderate-to-strong among personnel low in emotional stability and high in conscientiousness, moderate among personnel high in both emotional stability and conscientiousness, and weak among personnel low in conscientiousness—whether low or high in emotional stability.

*Hypothesis 2-4b.* The indirect effect of EO climate on emotional exhaustion through POS is jointly moderated by emotional stability and conscientiousness. Specifically, the relationship is moderate-to-strong among personnel low in emotional stability and high in conscientiousness, moderate among personnel high in both emotional stability and conscientiousness, and weak among personnel low in conscientiousness—whether low or high in emotional stability.

## **Control Variables**

Previous work on perceptions of employment discrimination suggests that demographic factors influence perceptions of discrimination (Avery et al., 2008). Therefore, we assessed and controlled for minority vs. non-minority status, age, hierarchical rank, and gender in the analyses. In addition, it is likely that individuals who have been victims of a hostile work environment are more likely to develop emotional exhaustion than those who have not. Accordingly, we also assessed and controlled for experienced sexual harassment and experienced discrimination in the analyses.

## **Method**

### **Participants and Procedure**

We collected data in the spring of 2011 from 2,897 United States military personnel, who voluntarily completed during work hours a survey in either paper or online form. The personnel were notified of the opportunity to participate in communications from their respective commanders.

Of the 2,897 participants, (a) 82.7% were male, and 17.3% were female; (b) 60.6% were non-minorities, and 39.4% were minorities; (c) 21.6% were junior enlisted, 53.2% were mid-level enlisted, 11.7% were senior enlisted, 1.0% were command-level enlisted, 6.5% were junior officers, and 6.0% were senior officers; (d) 74.2% were on active duty, 2.9% were traditional national guardsman, 5.4% were national guardsman on active duty, 6.7% were traditional reservists, 8.5% were reservists on active duty, and 2.2% did not indicate the nature of their employment; (e) 15.8% were less than 20 years old, 43.7% were 20-25 years old, 25% were 26-30 years old, 12.9% were 31-40 years old, and 2.6% were 41 years old or older; (f) 1.0% were in the Air Force, 60.4% were in the Army, 2.3% were in the Coast Guard, 13.0% were in the Marines,

and 23.3% were in the Navy; (g) 69.1% had not deployed in six or more months or had never deployed, 5.6% had returned from combat in the last six months, 5.5% had returned from non-combat in the last six months, 3.7% were deployed within the Continental United States, 8.8% were deployed outside of the Continental United States in non-combat zones, and 7.4% were deployed outside of the Continental United States in combat zones.

## Measures

**Emotional Exhaustion.** We assessed exhaustion using five items adapted from Maslach Jackson, and Leiter's (1996) burnout inventory. We used the phrase "duty" or "duty assignments" in place of "work" (e.g., "I feel emotionally drained from our duty assignments"). Individuals responded on a 5-point Likert-type scale ranging from (1 = Strongly Disagree, to 5 = Strongly Agree). High scores reflect high levels of emotional exhaustion.

**EO Climate.** EO climate was captured by 18 items (e.g., "A supervisor did not select a qualified subordinate for promotion because of his or her race/ethnicity," and "Someone made sexually suggestive remarks about another person") designed to measure the level of race, sex, religion, and disability-related discrimination or harassment present in the work environment. Prior work on the DEOCS supports the internal consistency and factor structure of this scale (Estrada, et al., 2007; Landis, Fisher, & Dansby, 1988; Truhon, 2003). Participants rated each item on the likelihood that the behavior *could* have occurred in the last 30 workdays on a scale ranging from (1 = "There is a *very high chance* that the action occurred," to 5 = "There is almost *no chance* that the action occurred"). Items were re-coded, such that high scores reflect an unfavorable, or hostile, work environment.

**Perceived Organizational Support.** We used the 8-item (e.g., "This organization really cares about our well-being," and "This organization shows little concern for me") POS scale

(Eisenberger, Hutchinson, Huntington, & Sowa, 1986) recommended by Rhoades and Eisenberger (2002). Participants responded on a 5-point, Likert-type scale (1 = “Strongly Disagree,” to 5 = “Strongly Agree”). High scores reflect high levels of perceived organizational support.

**Personality.** We used the Big Five factor markers in the International Personality Item Pool Goldberg’s (1999) to measure personality. Four items (e.g., “I worry about things”) assessed emotional stability, and four items (e.g., “I am almost always prepared”) assessed conscientiousness. Participants responded on a 5-point Likert-type scale ranging from (1 = Strongly Disagree, to 5 = strongly agree). High scores reflect high levels of emotional stability and conscientiousness, respectively.

**Experienced Discrimination.** We asked participants to “mark all that apply” in response to the item, “Within the past 12 months, we have personally experienced an incident of discrimination within our current organization” and these response options: (a) “YES, racial/national origin/color,” (b) “YES, gender (sex),” (c) “YES, age,” (d) “YES, disability,” (e) “YES, religion,” and (f) “NO.” We assigned the value of 0 to the “NO” response and a value of 1 to each “YES” response. We then added the “YES” responses for each participant, yielding a range from 0 to 5. High scores reflect high levels of experienced discrimination. Of the 2,897 participants, 82.4% reported no incidents of discrimination, 11.9% reported one type of incident of discrimination, 3.1% reported two types of incident of discrimination, 1.4% reported three types of incident of discrimination, .4% reported four types of incident of discrimination, and .7% reported four types of incident of discrimination.

**Sexual Harassment.** We asked participants to respond “YES” or “NO” to the item, “Within the past 12 months, we have personally experienced an incident of sexual harassment within our current organization.” We assigned the value of 0 to the “NO” response and a value of 1

to the “YES” response. Hence, high scores reflect experienced sexual harassment. Of the 2,897 participants, whereas 92.9% reported that they had not been sexually harassed, 7.1% reported that they had been sexually harassed.

### **Preliminary Analyses**

As we did in Study One because the constructs were measured using self-report, we employed confirmatory factor analyses to assess whether common method variance would have had substantial influence over the results before testing the hypotheses (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003; Williams, Cote, & Buckley, 1989). We found that the average variance explained by the method factor was 8%, which is less than the 25% of the average reported in Williams et al. (1989). Moreover, the addition of the method factor from the baseline model once again did not significantly improve model fit. Therefore, we suggest that the threat of common method bias for the study was no worse than previously published studies utilizing self-report data.

As was the case in Study One, participants were clustered into workgroups by virtue of reporting to different leaders. Therefore, we once again conducted Analysis of Variance to calculate the Intraclass Correlation (ICC[1]) to determine if this clustering influenced the results. The ICC(1) was .10, and the ICC(2) was .50 [ $F(390/2506) = 2.007, p < .01$ ]. As the ICC(1) was above the .05 threshold, we knew that some of the variance in emotional exhaustion was due to group-level effects. However, because the capability to derive bootstrapping estimates for the conditional effects in a multilevel model does not yet exist, we did not run multilevel modeling and note this as a weakness of the study.

### **Results**

We present the descriptive statistics, intercorrelation matrix, and reliability ( $\alpha$ ) estimates in Table 5. As shown there and consistent with Hypotheses 2-1 and 2-2, both EO climate ( $r = .31, p <$

.01) and POS ( $r = -.56, p < .01$ ), were moderately related to emotional exhaustion, as was emotional stability ( $r = -.46, p < .01$ ).

To test the meditational (Hypothesis 2-3) and moderated mediation hypotheses (Hypotheses 2-4a and 2-4b), we followed procedures described by Preacher, Rucker, and Hayes (2007) and Edwards and Lambert (2007). In doing so, we employed the “PROCESS” SPSS macro (Hayes, 2012) and centered the predictors before creating the interaction terms. This macro runs the two separate regression models that together provide the information necessary to calculate the full structural model, which is equivalent to Hayes’ (2012) “Model 73” and is presented in Figure 2. This model includes the conditional indirect effect ( $a \times b$ ), the direct effect ( $c'$ ) and the total effect ( $c$ ), which we illustrate as the proposed conceptual model in Figure 3. With POS as the criterion variable, the first model calculated path  $a$  (Figure 3), the results of which we present in Table 6. With emotional exhaustion as the criterion variable, the second model calculated path  $b$  (Figure 3), the results of which we present in Table 7. A notable feature of the macro is a bootstrapping procedure, which generated 10,000 bootstrap sample means and estimated the conditional indirect effect ( $a \times b$ ) at high and low levels of emotional stability and conscientiousness, which we present in Table 8.

According to Preacher et al. (2007), if one, either, or both of the interaction terms from the first model (EO climate  $\times$  emotional stability  $\times$  conscientiousness) and second model (POS  $\times$  emotional stability  $\times$  conscientiousness) are statistically significant, and the 95% confidence intervals associated with the indirect effect do not contain zero, moderated mediation exists. Although such other methods as the Sobel test (Sobel, 1982, 1986) are traditionally used to test for the significance of mediation, the Sobel test assumes that the sampling distribution of the conditional indirect effect of X on Y ( $a \times b$ ) is normal, when in fact it may be non-normal (Preacher



& Hayes, 2004). As a result, a bootstrapping method in which 95% confidence intervals are generated for conditional indirect effects is more appropriate (Hayes, 2012; Preacher & Hayes, 2004; Preacher, et al., 2007). As shown in Tables 6 and 7, both the EO climate x emotional stability x conscientiousness ( $B = -.112, p < .01$ ; Table 6) and POS x emotional stability x conscientiousness ( $B = -.068, p < .01$ , Table 7) cross-product terms were statistically significant. As shown in Table 8, none of the confidence intervals associated with the indirect effect contained zero. These results suggest that the indirect effects of EO climate on emotional exhaustion were moderated by emotional stability and conscientiousness. We present in Figure 4 a graphical illustration of the indirect effect of EO climate on emotional exhaustion through POS. As reflected in Table 8 and Figure 4, the effect was weak among personnel at low levels of both emotional stability and conscientiousness ( $B = .130$ ), weakest among personnel at high levels of emotional stability and low levels of conscientiousness ( $B = .112$ ), moderate among personnel at low levels of emotional stability and high levels of conscientiousness ( $B = .284$ ), and strongest among personnel at high levels of both emotional stability and conscientiousness ( $B = .479$ ).

As shown in Table 7, whereas the main effect of POS ( $B = -.485, p < .01$ ) on emotional exhaustion in the second model was significant, the main effect of EO climate ( $B = .053, ns$ ) was not. Moreover, as reflected in Table 9, which presents the results of the assessment of the conditional direct effects of EO climate on emotional exhaustion at low, average, and high levels of both emotional stability and conscientiousness, the direct effect was not significant across all levels of both moderators. These results suggest that the effects of EO climate on emotional exhaustion are fully mediated by POS; that is, they are indirect through POS. Thus, as there were neither direct effects nor conditional direct effects of EO climate on emotional exhaustion, the data revealed only partial support for Hypothesis 2-3 and were inconsistent with Hypothesis 2-4a.

## Discussion

We described a psychological process in which the EO climate influences perceptions regarding how the organization supports its personnel. We argued that because perceptions of support are driven by the actions of organizational agents that are attributed to the organization itself, when individuals or supervisors in the work environment engage in discriminating behavior, those around them form the impression that the organization does not support or value any individuals—not just those being discriminated against. Hence, an unfavorable EO climate reduces perceptions of organizational support, which then leads to increased emotional exhaustion because an unfavorable EO climate contributes to a general sense that the organization does not value its personnel. We further argued that some of the effect of EO climate on emotional exhaustion is likely direct because (1) the physical and psychological efforts needed to combat work demands are directly related to burnout according to the health impairment process of the JD-R model, and (2) POS does not fully capture other variables that may mediate the link between EO climate and emotional exhaustion. The data revealed that EO climate has no direct effect on emotional exhaustion. Rather, POS fully mediated the EO climate-emotional exhaustion link (i.e., an indirect rather than direct process).

The data also revealed that the psychological process is affected by the personality of the perceiver. The joint effects of emotional stability and conscientiousness were such that the indirect effects of the EO climate on emotional exhaustion through POS were very weak among personnel at high levels of emotional stability and low levels of conscientiousness, weak among personnel at low levels of both emotional stability and conscientiousness, moderate among personnel at low levels of emotional stability and high levels of conscientiousness, and strongest among personnel

at high levels of both emotional stability and conscientiousness. In other words, the effect of EO climate on emotional exhaustion is best described as a conditional, indirect effect.

As reflected in Figure 4, the data were consistent with our predictions that (1) the unconcerned high-emotional stability, low-conscientiousness individuals are relatively low in emotional exhaustion most of the time, such that they experience substantially lower levels of emotional exhaustion when reporting an unfavorable EO climate than personnel in the other three combinations of conscientiousness and emotional stability; (2) the indirect effect of EO climate on emotional exhaustion is weak among personnel low in conscientiousness—whether low or high in emotional stability; and (3) the overanxious low-emotional stability, high-conscientiousness personnel reported the highest levels of emotional exhaustion.

However, as reflected in Figure 4, the data were inconsistent with our prediction that the indirect effect of EO climate on emotional exhaustion is moderate-to-strong among personnel low in emotional stability and high in conscientiousness versus moderate among personnel high in both emotional stability and conscientiousness. On the contrary, the relationship was strongest among personnel high in both emotional stability and conscientiousness. This result suggests that because persons low in emotional stability are likely to be emotionally exhausted or to be approaching emotional exhaustion much of the time, the negative impact of an unfavorable EO climate may have moved them a little higher (yet still at the highest level of the four groups). In contrast, persons high in emotional stability are likely to experience emotional exhaustion when they actually perceive an unfavorable work environment, so the emotionally stable, highly conscientious personnel were most impacted by it.

### **Limitations of the Present Study**

We emphasize three limitations of this study. First, we again employed self-report methodology. Again, the confirmatory factor analyses indicated that common method variance probably did not bias the results of this study any more than has been the case in previously published studies. However, we again emphasize that a range of potential sources of variance in responses must be considered; these may have biased our results.

Second, the data were again cross-sectional. Therefore, we cannot rule out the possibility that exhaustion affects how employees report on leadership style and unit cohesion. However, personality is largely stable and, thus, unlikely to be significantly affected by exhaustion (Barrick & Mount, 2005).

Third, although the capability to derive bootstrapping estimates for the conditional effects in a multilevel model does not yet exist, we emphasize that a major weakness of the study is that we were unable to directly assess the group-level effects, which the ICC(1) of .10 revealed characteristic of the data. Another limitation of the present study is that Air Force personnel were underrepresented in the sample. We emphasize that replication is needed before these results are applied to policy-making decisions.

### **Strengths of the Present Study**

A strength of the present study is that results revealed that common method bias is unlikely to have yielded artificially high correlations coefficients. Hence, we suggest some confidence in the findings, pending replication. The primary strength of the present study is that the conditional indirect effects of EO climate emotional exhaustion were impactful and statistically significant, even after controlling for four demographic factors—gender, age, rank, and minority status—as well as whether or not persons had been the victim(s) of sexual harassment and/or discrimination.

That the effects held up even accounting for demographic factors that could have affected differential experiences, as well as for actual experiences of sexual harassment and/or discrimination, suggests that the findings are important. Indeed, we found that perceptions of co-workers and/or supervisors in the work environment engaging in discriminating behavior yielded an impression that the organization does not support or value any individuals—not just those being discriminated against or those whose demographic groups have traditionally been targeted, which then increased emotional exhaustion.

### **Implications for Theory**

We identified competing hypotheses based on the Job Demands Resources (JD-R) model and Trait Activation Theory and then applied the Abridged Five-Dimensional Circumstance to identify how and for whom discrimination yields psychological strain. To our knowledge, the notion that job demands influence perceptions of a job resource (i.e., POS) has not been discussed by JD-R theorists. In that regard, we have informed JD-R theory. More importantly, however, the results suggest that emotional stability and conscientiousness may not always act as resources, *per se*. Rather, they may simply predispose reactions to the environment. Therefore, our results provide some support for Trait Activation Theory, and they provide an opportunity to revisit some of the assumptions underlying the notion in JD-R theory that personality traits function as personal resources. We invite future researchers to investigate this issue.

Application of the AB5C was very helpful. Not surprisingly, the main effect of emotional stability on emotional exhaustion was pronounced. Regardless of the levels of conscientiousness and EO climate, emotionally unstable personnel were more emotionally exhausted than emotionally stable personnel. However, among the emotionally unstable, conscientiousness made a difference: The highly conscientious, emotionally unstable personnel were far more affected by

an unfavorable EO climate than their low-conscientiousness counterparts. Perhaps, even more important is that high-emotional stability, low-conscientiousness people appear to have been relatively insensitive to EO climate and POS levels in the environment. Unlike personnel in the other three combinations of conscientiousness and emotional stability, they reported substantially lower levels of emotional exhaustion, even when reporting an unfavorable EO climate. In contrast, the high-emotional stability, high-conscientiousness personnel were very sensitive to an unfavorable EO climate, as reflected by their reaching levels of emotional exhaustion approaching the levels of the low- and high-conscientiousness, low-emotional stability groups.

### **Conclusion**

Mission readiness is at risk when personnel are emotionally exhausted. In two studies, we found that aspects of equal opportunity climate yield emotional exhaustion. Consistent with theory, previous research, and best practices in leadership, results of the two studies revealed two important findings.

The first key finding is that simply being a good leader in terms of focusing on mission accomplishment is insufficient to prevent emotional exhaustion. Whereas an effective task focus is clearly critical to mission accomplishment, failing to both engage in highly favorable equal opportunity behaviors and attend to group dynamics (i.e., cohesion of subordinate units) is likely to lead eventually to emotional exhaustion. Doing so threatens subsequent mission readiness and mission accomplishment.

The second key finding is two-fold. Equal opportunity climate may have appeared unimportant to previous researchers because it does not have direct effects on indicators of mission readiness, such as emotional exhaustion. We learned that an unfavorable EO climate yields emotional exhaustion by reducing perceptions that the organization cares about and supports

personnel. In other words, it appears as though an unfavorable EO climate demoralizes and stresses DOD personnel. We also learned that this psychological process primarily affects highly conscientious personnel and has very little effect on personnel high in emotional stability and low in conscientiousness.

### **Implications for Training and Leadership: Studies One and Two**

Based on the data, we offer three implications for policy-makers interested in mission readiness to consider. First, efforts to train and develop leaders in the DOD might be well served by including an emphasis on EO climate-related issues and mechanisms for promoting and maintaining unit cohesion. Some leaders by their nature are likely to dismiss any aspects of leadership other than a focus on the tasks underlying mission implementation, although some may give lip service to people-related concerns, such as fairness. The opportunity cost for failure is particularly high when personnel are deployed, which means that emotional exhaustion is a serious threat to operational capability and success. It is likely that many leaders—deployed or not—underestimate the criticality of EO climate-related issues and unit cohesion; alternatively, they might not know what actions most efficiently and effectively promote a favorable EO climate and high levels of unit cohesion.

Second, efforts to train and develop leaders in the DOD might also be well served by including a focus on dealing with subordinates with different personalities. The opportunity to do so has been underutilized, although there has been research demonstrating the impact of individualized leadership practices (Gerstner & Day, 1997; House, 1996; Kellerman, 2007). Efforts to promote employee well-being include consideration of fit between leadership style and subordinate personality. Supervisors who adapt their communication style, resource allocations, and motivational approach to subordinate personalities are likely to be most effective. Anecdotal

estimates suggest that leaders spend about 90% of their personnel time dealing with the bottom 10% of their personnel. Our results clearly indicate that it is the highly conscientious who are most impacted by an unfavorable EO climate. Typically, leaders spend little time with their highly conscientious personnel because they can rely on them to accomplish the mission; that is, they trust them to get it done right and on time. We respectfully suggest that attention to the needs and attitudes of the most conscientious personnel is important if mission readiness and success over the long-term is important. In other words, even the most hard-working and diligent personnel can essentially break down due to circumstances. Leader efforts to attend to socio-cultural issues in the task environment are critical in preventing those breakdowns.

Third, we call for future research to investigate best practices in leadership in the DOD that promote a favorable EO climate as well as unit cohesion. Clearly, the role of the EO advisor is crucial to promoting these endeavors, and a long history of research at DEOMI has provided answers. However, as generations change, so do the characteristics and expectations of incoming personnel. Hence, this remains an ongoing challenge for the DOD research community.



## References

- American Institute of Stress. (2012). Stress in the workplace. Retrieved from [http://www.stress.org/Stress\\_in\\_the\\_workplace.htm](http://www.stress.org/Stress_in_the_workplace.htm).
- Arthur, W., Jr., Woehr, D. J., & Graziano, W. G. (2001). Personality testing in employment settings: Problems and issues in the application of typical selection practices. *Personnel Review, 30*, 657–676.
- Avery, D. R., McKay, P. F., & Wilson, D. C. (2008). What are the odds? How demographic similarity affects the prevalence of perceived employment discrimination. *Journal of Applied Psychology, 93*(2), 235–249.
- Baker, J. P., & Berenbaum, H. (2007). Emotional approach and problem-focused coping: A comparison of potentially adaptive strategies. *Cognition and Emotion, 21*, 95–118.
- Bakker, A. B. (2008). *Work engagement*. Keynote presented at the eighth annual conference of the European Academy of Occupational Health Psychology, 12 Nov-14 Nov, Valencia, Spain.
- Bakker, A. B., Demerouti, E., De Boer, E., & Schaufeli, W.B. (2003a). Job demands and job resources as predictors of absence duration and frequency. *Journal of Vocational Behavior, 62*, 341–56.
- Bakker, A. B., Van Der Zee, K. I., Lewig, K. A., & Dollard, M. F. (2006). The relationship between the Big Five personality factors and burnout: A study among volunteer counselors. *The Journal of Social Psychology, 146*, 31–50.
- Bakker, A.B., & Demerouti, E. (2007). The Job Demands-Resources model: State of the art. *Journal of Managerial Psychology, 22*(3), 309–328.
- Bakker, A.B., Demerouti, E., & Euwema, M.C. (2005). Job resources buffer the impact of job demands on burnout. *Journal of Occupational Health Psychology, 10*, 170–80.

- Bakker, A.B., Demerouti, E., & Schaufeli, W.B. (2003b). Dual processes at work in a call centre: an application of the Job Demands-Resources model. *European Journal of Work and Organizational Psychology, 12*, 393–417.
- Bar-Haim, Y., Lamy, D., Pergamin, L., Bakermans-Kranenburg, M. J., & van IJzendoorn, M. H. (2007). Threat-related attentional bias in anxious and non-anxious individuals: A meta-analytic study. *Psychological Bulletin, 133*, 1–24.
- Barrick, M. R., & Mount, M. K. (1991). The Big Five personality dimensions and job performance: A meta-analysis. *Personnel Psychology, 44*, 1–26.
- Barrick, M. R., & Mount, M. K. (1993). Autonomy as a moderator of the relationship between conscientiousness and job performance. *Journal of Applied Psychology, 18*, 111–118.
- Barrick, M. R., & Mount, M. K. (2005). Yes, personality matters: Moving on to more important matters. *Human Performance, 18*, 359–372.
- Barrick, M. R., Mount, M. K., & Judge, T. A. (2001). Personality and performance at the beginning of the new millennium: What do we know and where do we go next? *International Journal of Selection and Assessment, 9*, 9–30.
- Barrick, M. R., Mount, M. K., & Judge, T. A. (2001). The FFM personality dimensions and job performance: Meta-Analysis of meta-analyses. *International Journal of Selection and Assessment, 9*, 9–30.
- Barrick, M. R., Mount, M. K., & Strauss, J. P. (1993). Conscientiousness and performance on sales representatives: Test of the mediating effects of goal setting. *Journal of Applied Psychology, 78*, 715–722.

- Beal, D. J., Cohen, R. R., Burke, M. J., & McLendon, C. L. (2003). Cohesion and performance in groups: A meta-analytic clarification of construct relations. *Journal of Applied Psychology, 88*, 989–1004.
- Beal, D., Cohen, R., Burke, M., & McLendon, C. (2003). Cohesion and performance in groups: A meta-analytic clarification of construct relations. *Journal of Applied Psychology, 88*, 989–1004.
- Becker, P. (1999). Beyond the Big Five. *Personality and Individual Differences, 26*, 511–530.
- Beehr, T. A., Jex, S. M., Stacy, B. A., & Murray, M. A. (2000). Work stressors and coworker support as predictors of individual strain and job performance. *Journal of Organizational Behavior, 21*, 391–405.
- Bell, M., McLaughlin, M., & Sequiera, J. (2002). Discrimination, harassment, and the glass ceiling: Women executives as change agents. *Journal of Business Ethics, 37*, 65–76.
- Billings, A. G., & Moos, R. H. (1981). The role of coping responses and social resources in attenuating the impact of stressful life events. *Journal of Behavioral Medicine, 4*, 139–157.
- Blascovich, J., & Tomaka, J. (1996). The biopsychosocial model of arousal regulation. In M. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 28, pp. 1–51). New York: Academic Press.
- Blau, P.M. (1964). *Exchange and power in social life*. New York: Wiley.
- Blickle, G., Meurs, J. A., Zettler, I., Solga, J., Noethen, D., Kramer, J., & Ferris, G. R. (2008). Personality, political skill, and job performance. *Journal of Vocational Behavior, 72*, 377–387.
- Block, J. (1995). A contrarian view of the five-factor approach to personality description. *Psychological Bulletin, 117*, 187–215.

- Bolger, N., & Zuckerman, A. (1995). A framework for studying personality in the stress process (1995). *Journal of Personality and Social Psychology*, *69*(5), 890–902.
- Bolger, N., & Schilling, E. A. (1991). Personality and the problems of everyday life: The role of neuroticism in exposure and reactivity to daily stressors. *Journal of Personality*, *59*, 355–386.
- Brief, A. P., Burke, M. J., George, J. M., Robinson, B. S., & Webster, J. (1988). Should negative affectivity remain an unmeasured variable in the study of job stress? *Journal of Applied Psychology*, *73*, 193–198.
- Brotheridge, C. M., & Lee, R. T. (2002). Testing a conservation of resources model of the dynamics of emotional labor. *Journal of Occupational Health Psychology*, *7*, 57–67.
- Cano-Garcia, F. J., Padilla-Muñoz, E. M., & Carrasco-Ortiz, M. A. (2005). Personality and contextual variables in teacher burnout. *Personality and Individual Differences*, *38*, 929–940.
- Center for American Progress. (2012). The costly business of discrimination. Retrieved from [http://www.americanprogress.org/issues/2012/03/pdf/lgbt\\_biz\\_discrimination.pdf](http://www.americanprogress.org/issues/2012/03/pdf/lgbt_biz_discrimination.pdf).
- Champoux, J. E., & Peters, W. S. (1987). Form, effect size and power in moderated regression analyses. *Journal of Occupational Psychology*, *60*, 243–255.
- Chang, E. (1998). Dispositional optimism and primary and secondary appraisal of a stressor: Controlling for confounding influences and relations to coping and psychological and physical adjustment. *Journal of Personality and Social Psychology*, *74*, 1109–1120.
- Chaplin, W. F. (1991). The next generation of moderator research in personality psychology. *Journal of Personality*, *59*, 143–178.

- Chemers, M. M. (2000). Leadership research and theory: A functional integration. *Group Dynamics: Theory, Research, and Practice*, 4, 27–43.
- Clark, R., Anderson, N., Clark, V., & Williams, D. (1999). Racism as a stressor for African Americans: A biopsychosocial model. *American Psychologist*, 54, 805–816.
- Colbert, A. E., & Witt, L. A. (2009). The role of task-oriented leadership in enabling the expression of conscientiousness. *Journal of Applied Psychology*, 94, 790–796.
- Colquitt, J. A., Conlon, D. E., Wesson, M. J., Porter, C. O. L. H., & Ng, K. Y. (2001). Justice at the millennium: A meta-analytic review of 25 years of organizational justice research. *Journal of Applied Psychology*, 86, 425–45.
- Connor-Smith, J. K., & Flachsbart, C. (2007). Relations between personality and coping: A meta-analysis. *Journal of Personality and Social Psychology*, 93, 1080–1107.
- Costa, P. T., & McCrae, R. R. (1988). Personality in adulthood: A six-year longitudinal study of self-reports and spouse ratings on the NEO Personality Inventory. *Journal of Personality and Social Psychology*, 54, 853–863.
- Coyle-Shapiro J., & Conway, N. (2005). Exchange relationships: examining psychological contracts and perceived organizational support. *Journal of Applied Psychology*, 90(4), 774–781.
- Cropanzano, R., Howes, J. C., Grandey, A. A., & Toth, P. (1997). The Relationship of Organizational Politics and Support to Work Behaviors, Attitudes, and Stress. *Journal of Organizational Behavior*, 18(2), 159–180.
- Cropanzano, R., Rupp, D., & Byrne, Z. (2003). The relationship of emotional exhaustion to work attitudes, job performance, and organizational citizenship behaviors. *Journal of Applied Psychology*, 88(1), 160–169.

- Dansby, M. R., & Landis, D. (1991). Measuring equal opportunity climate in the military environment. *International Journal of Intercultural Relations, 15*, 389–403.
- Dansby, M. R., & Landis, D. (1998). Race, gender, and representation index as predictors of an equal opportunity climate in the military. *Military Psychology, 10*, 87–105.
- de Jong, G. M., & Emmelkamp, P. M. G. (2000). Implementing a stress management training: Comparative trainer effectiveness. *Journal of Occupational Health Psychology, 5*, 309–320.
- Diefendorff, J. M., & Mehta, K. (2007). The relations of motivational traits with workplace deviance. *Journal of Applied Psychology, 92*, 967–977.
- De Rijk, A. E., Le Blanc, P. M., & Schaufeli, W. B. (1998). Active coping and need for control as moderators of the job demand-control model: Effects on burnout. *Journal of Occupational and Organizational Psychology, 71*, 1–18.
- Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands-resources model of burnout. *Journal of Applied Psychology, 86*, 499–512.
- Digman, J. M., & Takemoto-Chock, N. K. (1981). Factors in the natural language of personality: Re-analysis, comparison, and interpretation of six major studies. *Multivariate Behavioral Research, 16*, 148–170.
- Digman, J.M. (1990). Personality structure: Emergence of the five-factor model. *Annual Review of Psychology 41*, 417–440.
- Edwards, J., & Lambert, L. (2007). Supplemental material for methods for integrating moderation and mediation: A general analytical framework using moderated path analysis. *Psychological Methods, 12*, 1–22.

- Eisenberger, R., Huntington, R., Hutchison, S., & Sowa, D. (1986). Perceived organizational support. *Journal of Applied Psychology, 71*(3), 500–507.
- Enders, C. K., & Tofighi, D. (2007). Centering predictor variables in cross-sectional multilevel model: A new look at an old issue. *Psychological Methods, 12*, 121–138.
- Estrada, A. X., Stetz, M. C., & Harbke, C. R. (2007). Further examination and refinement of the psychometric properties of the MEOCS with data from reserve component personnel. *International Journal of Intercultural Relations, 31*, 137–161.
- Eysenck, H. J. (1992). Four ways five factors are not basic. *Personality and individual differences, 13*, 667–673.
- Firestone, J. M. (2007). *The relationship between equal opportunity climate and organizational effectiveness: A preliminary analysis of results from the DEOCS*. Unpublished Internal Research Report, Equal Opportunity Management Institute, Patrick Air Force Base, FL.
- Fiske, D.W. (1949). Consistency of the factorial structures of personality ratings from different sources. *Journal of Abnormal Social Psychology, 44*, 329–344.
- Fitzgerald, L., Drasgow, F., Hulin, C., Gelfand, M., & Magley, V. (1997). Antecedents and consequences of sexual harassment in organizations: A test of an integrated model. *Journal of Applied Psychology, 82*(4), 578–589.
- Folger, R., & Greenberg, J. (1985). Procedural justice: An interpretive analysis of personnel systems. In K.M. Rowland, & G.R. Ferris (Eds.), *Research in Personnel and Human Resources Management* (Vol. 3, pp.141–183). Greenwich, CT: JAI Press.
- Folkman, S. (1984). Personal control and stress and coping processes: Atheoretical analysis. *Journal of Personality and Social Psychology, 46*, 839–852.

- Folkman, S., & Lazarus, R. S. (1980). An analysis of coping in a middle-aged community sample. *Journal of Health and Social Behavior, 21*, 219–239.
- Gellatly, I. (1996). Conscientiousness and task performance: Test of a cognitive process model. *Journal of Applied Psychology, 5*, 474–482.
- Gerstner, C. R., & Day, D. V. (1997). Meta-analytic review of leader-member exchange theory: Correlates and construct issues. *Journal of Applied Psychology, 82*, 827–844.
- George, J. M., & Bettenhausen, K. (1990). Understanding pro-social behavior, sales performance, and turnover: A group-level analysis in a service context. *Journal of Applied Psychology, 75*, 698–709.
- George, J. M., Reed, T. F., Ballard, K. A., Colin, J., & Fielding, J. (1993). Contact with AIDS patients as a source of work related distress effects of organizational and social support. *Academy of Management Journal, 36*, 157–171.
- Goldberg, L. R. (1999). A broad-bandwidth, public-domain, personality inventory measuring the lower-level facets of several five-factor models. In I. Mervielde, I. J. Deary, F. De Fruyt & F. Ostendorf (Eds.), *Personality psychology in Europe* (vol. 7, pp. 7–28). Tilburg, The Netherlands: Tilburg University Press.
- Goldberg, L. R. (1992). The development of markers for the Big Five factor structure. *Psychological Assessment, 4*, 26–42.
- Goldberg, L. R. (1993). The structure of phenotypic personality traits. *American Psychologist, 48*, 26–34.



- Goldberg, L. R. (1999). A broad-bandwidth, public-domain, personality inventory measuring the lower-level facets of several five-factor models. In I. Mervielde, I. J. Deary, F. De Fruyt, & F. Ostendorf (Eds.), *Personality psychology in Europe* (Vol. 7, 7–28). Tilburg, The Netherlands: Tilburg University Press.
- Goldberg, L. R., Johnson, J. A., Eber, H. W., Hogan, R., Ashton, M. C., Cloninger, C. R., & Gough, H. C. (2006). The International Personality Item Pool and the future of public-domain personality measures. *Journal of Research in Personality, 40*, 84–96.
- Goldman, B., Gutek, B., Stein, J., & Lewis, K. (2006). Employment Discrimination in Organizations: Antecedents and Consequences. *Journal of Management, 32*, 786–830.
- Gonzalez, J., & Denisi, A. (2009). Cross-level effects of demography and diversity climate on organizational attachment and firm effectiveness. *Journal of Organizational Behavior, 30*, 21–40.
- Gouldner, A. W. (1960). The norm of reciprocity: a preliminary statement. *American Sociological Review, 25*, 161–178.
- Halbesleben, J. R. B., & Bowler, W. M. (2007). Emotional exhaustion and job performance: The mediating role of motivation. *Journal of Applied Psychology, 92*, 93–106.
- Halbesleben, J. R. B., & Buckley, M. R. (2004). Burnout in organizational life. *Journal of Management, 30*, 859–879.
- Halbesleben, J. R., Harvey, J., & Bolino, M. C. (2009). Too engaged? A Conservation of Resources view of the relationship between work engagement and work interference with family. *Journal of Applied Psychology, 94*, 1452–1465.

- Hayes, A. F. (2012). PROCESS: A versatile computational tool for observed variable moderation, mediation, and conditional process modeling. Retrieved from <http://www.afhayes.com/public/process2012.pdf>.
- Hendriks, A. A. J., Hofstee, W. K. B., & de Raad, B. (1999). The Five-Factor Personality Inventory (FFPI). *Personality and Individual Differences, 27*, 307–325.
- Higgins, J. E., & Endler, N. S. (1995). Coping, life stress, and psychological and somatic distress. *European Journal of Personality, 9*, 253–270.
- Hobfoll, S. E. (1989). Conservation of resources: A new attempt at conceptualizing stress. *American Psychologist, 44*, 513–524.
- Hobfoll, S. E. (1989). Conservation of resources: A new attempt at conceptualizing stress. *American Psychologist, 44*, 513–524.
- Hobfoll, S. E. (2001). The influence of culture, community, and the nested self in the stress process: Advancing conservation of resources theory. *Applied Psychology: An International Review, 50*, 337–421.
- Hobfoll, S. E. (2001). The influence of culture, community, and the nested self in the stress process: Advancing conservation of resources theory. *Applied Psychology: An International Review, 50*, 337–421.
- Hobfoll, S. E. (2002). Social and psychological resources and adaptation. *Review of General Psychology, 6*, 307–324.
- Hobfoll, S. E., Johnson, R. J., Ennis, N., & Jackson, A. P. (2003). Resources loss, resources gain, and emotional outcomes among inner city women. *Journal of Personality and Social Psychology, 84*, 632–643.

- Hofstee, W. K. B., de Raad, B., & Goldberg, L. (1992). Integration of the big five and circumplex approaches to trait structure. *Journal of Personality and Social Psychology*, *65*, 563–576.
- Hofstee, W. K. B., Ten-Berge, J. M. F., & Hendriks, A. A. J. (1998). How to score questionnaires. *Personality and Individual Differences*, *25*, 897–909.
- Hogan, R. T., & Hogan, J. (1992). *Hogan Personality Inventory manual*. Tulsa, OK: Hogan Assessment Systems.
- Hooper, S. K., Miller, D. I., Topping, J. S., & Wells-Parker, E. N. (1989). Construction and validation of a sex-based equal-opportunity measure for the college campus. *Psychological Reports*, *64*, 1231–1238.
- House, R. J. (1996). Path-goal theory of leadership: Lessons, legacy, and a reformulated theory. *The Leadership Quarterly*, *7*, 323–352.
- Hough, L. M., & Ones, D. S. (2002). The structure, measurement, validity, and use of personality variables in industrial work, and organizational psychology. In N. Anderson, D. Ones, H. Sinangil, & C. Viswesvaran (Eds.), *Handbook of industrial, work & organizational psychology* (Vol. 1, pp. 233–277). London: Sage.
- House, R. J. (1996). Path-goal theory of leadership: Lessons, legacy, and a reformulated theory. *Leadership Quarterly*, *7*, 323–352.
- Hulin, C., Fitzgerald, L., & Drasgow, F. (1996). Organizational influences on sexual harassment. In M. S. Stockdale (Ed.), *Sexual Harassment in the workplace*. Thousand Oaks: Sage Publications, Inc.
- Hurtz, G. M., & Donovan, J. J. (2000). Personality and job performance: The Big Five revisited. *Journal of Applied Psychology*, *85*, 869–879.

- James, L. R., & Jones, A. P. (1974). Organizational climate: A review of theory and research. *Psychological Bulletin, 81*, 1096–1112.
- Jensen, I. W., & Gutek, B. A. (1982). Attributions and assignment of responsibility in sexual harassment. *Journal of Social Issues, 38*(4), 121–136.
- John, O. P., & Srivastava, S. (1999). The “Big Five” trait taxonomy: History, measurement, and theoretical perspectives. In L. Pervin & O. P. John (Eds.), *Handbook of personality: Theory and research* (2nd ed., pp. 102–138). New York: Guilford.
- Johnson, J. A., & Ostendorf, F. (1993). Clarification of the five-factor model with the abridged big five dimensional circumplex. *Journal of Personality and Social Psychology, 65*, 563–576.
- Johnston, R. (2008). Hostile work environment—Barriers, flows, and assessment. *International Journal of Service Industry Management, 19*, 210–231.
- Judge, T. A., & Bono, J. E. (2001). Relationship of core self-evaluations traits—self-esteem, generalized self-efficacy, locus of control, and emotional stability—with job satisfaction and job performance: A meta-analysis. *Journal of Applied Psychology, 86*, 80–92.
- Judge, T. A., & Colquitt, J. A. (2004). Organizational justice and stress: The mediating role of work-family conflict. *Journal of Applied Psychology, 89*, 395–404.
- Judge, T. A., & Ilies, R. (2002). Relationship of personality to performance motivation: A meta-analytic review. *Journal of Applied Psychology, 87*, 797–807.
- Judge, T. A., Higgins, C. A., Thoresen, C. J., & Barrick, M. R. (1999). The big five personality traits, general mental ability, and career success across the life span. *Personnel Psychology, 52*, 621–652.

- Judge, T. A., Locke, E. A., & Durham, C. C. (1997). The dispositional causes of job satisfaction: A core evaluation. In L. L. Cummings & B. M. Straw (Eds.), *Research in organizational behavior* (Vol. 19, pp. 151–188). Greenwich, CT: JAI Press.
- Kammeyer-Mueller, J. D., Judge, T. A., & Scott, B. A. (2009). The role of core self-evaluations in the coping process. *Journal of Applied Psychology, 94*(1), 177–195.
- Kellerman, B. (2007). What every leader needs to know about followers. *Harvard Business Review, 85*(12), 84–91.
- Knouse, S. B., & Dansby, M. R. (1999). Percentage of work-group diversity and work-group effectiveness. *The Journal of Psychology, 133*, 486–494.
- Konrad, A., & Gutek, B. (1986). Impact of work experiences on attitudes toward sexual harassment. *Administrative Science Quarterly, 31*, 422–438.
- Landis, D., Dansby, M., & Faley, R. (1993). The Military Equal Opportunity Survey: An example of surveying in organizations. In P. Rosenfeld, J. Edwards, and M. Thomas (Eds.), *Improving organizational surveys: New directions, methods, and applications* (pp. 210-239). Newbury Park, CA: Sage.
- Landis, D., Fisher, G., & Dansby, M. R. (1988). Construction and preliminary validation of an equal opportunity climate assessment instrument. In F. E. McIntire (Ed.), *Proceedings of Psychology in the DOD Symposium* (Tech. Rep. No. 88-1, pp. 487– 491). Colorado Springs, CO: U. S. Air Force Academy.
- Landis, D., Fisher, G., & Dansby, M. R. (1988). *Construction and preliminary validation of an equal opportunity climate assessment instrument*. Paper presented at the Annual Psychology in the DOD Symposium, Colorado Springs, CO.

- Langelaan, S., Bakker, A. B., van Doornen, L. J. P., & Schaufeli, W. (2006). Burnout and work engagement: Do individual differences make a difference? *Personality and Individual Differences, 40*, 521–532.
- Lazarus, R. S. (1991). *Emotion and adaptation*. New York: Oxford University Press.
- Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. New York: Springer.
- Leather, P., Lawrence, C., Beale, D., & Cox, T. (1998). Exposure to occupational violence and the buffering effects of intra-organizational support. *Work and Stress, 12*, 161–178.
- LeBlanc, P. M., Hox, J. J., Schaufeli, W. B., Wilmar, B., Peeters, M. C. W., & Taris, T. W. (2007). Take care! The evaluation of a team-based burnout intervention program for oncology care providers. *Journal of Applied Psychology, 92*, 213–227.
- 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*(2), 123–133.
- LePine, J. A., LePine, M. A., & Jackson, C. (2004). Challenge and hindrance stress: Relationships with exhaustion, motivation to learn, and learning performance. *Journal of Applied Psychology, 89*, 883–891.
- Levin, S., Sinclair, S., Veniegas, R. C., & Taylor, P. L. (2002). Perceived discrimination in the context of multiple group memberships. *Psychological Science, 13*, 557–560.
- Lipari, R. N., Cook, P. J., Rock, L. M., & Matos, K. (2008). 2006 gender relations survey of active duty members. Arlington, VA: Department of Defense Manpower Data Center.
- Long, B. C. (1990). Relation between coping strategies, sex-typed traits, and environmental characteristics: A comparison of male and female managers. *Journal of Counseling Psychology, 37*, 185–194.

- Luthans, F., Avey, J. B., Avolio, B. J., Norman, S. M., & Combs, G. M. (2006). Psychological capital development: Toward a micro-intervention. *Journal of Organizational Behavior*, 27, 387–393.
- Mäkikangas, A., & Kinnunen, U. (2003). Psychosocial work stressors and well-being: Self-esteem and optimism as moderators in a one-year longitudinal sample. *Personality and Individual Differences*, 35, 537–557.
- Martindale, M. (1991). Sexual harassment in the military. *Sociological Practice Review*, 2, 200–216.
- Maslach, C. (1982). *Burnout: The cost of caring*. Englewood Cliffs, NJ: Prentice Hall.
- Maslach, C. (2003). Job burnout: New directions in research and intervention. *Psychological Science*, 12(5), 189–192.
- Maslach, C., & Leiter, M. P. (2008). Early predictors of job burnout and engagement. *Journal of Applied Psychology*, 93, 498–512.
- Maslach, C., Jackson, S. E., & Leiter, M. P. (1996). *Maslach Burnout Inventory manual* (3rd ed.). Mountain View, CA: CPP, Inc.
- Mayer, D. M., Ehrhart, M. G., & Schneider, B. (2009). Service attribute boundary conditions of the service climate—customer satisfaction link. *Academy of Management Journal*, 52, 1034–1050.
- McCrae, R. R., & Costa, P. T., Jr. (1986). Personality, coping, and coping effectiveness in an adult sample. *Journal of Personality*, 54, 385–405.
- McCrae, R. R., & Costa, P. T., Jr. (1985). Updating Norman's adequacy taxonomy: Intelligence and personality dimensions in natural language and in questionnaires. *Journal of Personality and Social Psychology*, 49, 710–721.

- McCrae, R. R., & Costa, P. T., Jr. (1999). A five-factor theory of personality. In L. Pervin & O. P. John (Eds.), *Handbook of personality: Theory and research* (2nd ed., pp. 139–153). New York: Guilford.
- McCrae, R. R., & Costa, P. T. (1985). Updating Norman's 'adequacy taxonomy': Intelligence and personality dimensions in natural language and in questionnaires. *Journal of Personality and Social Psychology*, *3*, 710–721.
- McIntyre, R. M., Bartle, S. A., Landis, D., & Dansby, M. R. (2002). The effects of equal opportunity fairness attitudes on job satisfaction, organizational commitment, and perceived work group efficacy. *Military Psychology*, *14*, 299–319.
- Meijman, T.F., & Mulder, G. (1998). Psychological aspects of workload. In P. J. Drenth, H. Thierry, and C. J. de Wolff (Eds.), *Handbook of Work and Organizational Psychology* (2nd ed., pp. 5–33). Hove, U.K.: Psychology Press, Ltd.
- Miller, D. I., Majors, M., Giesen, M., & Topping, J. S. (1990). The Hooper equal opportunity measure: An operational definition of ecological dissonance theory. *Bulletin of the Psychonomic Society*, *28*, 164–166.
- Mills, L. B., & Huebner, E. S. (1998). A prospective study of personality characteristics, occupational stressors, and burnout among school psychology practitioners. *Journal of School Psychology*, *36*, 103–120.
- Mor Barak, M. E., Cherin, D. A., & Beckman, S. (1998). Organizational and personal dimensions of diversity climate. *Journal of Applied Behavioral Science*, *34*, 82–105.
- Mullen, B., & Copper, C. (1994). The relation between group cohesiveness and performance: An integration. *Psychological Bulletin*, *115*, 210–227.



- Murdoch, M., Pryor, J. B., Polusny, M. A., & Gackstetter, G. D. (2007). Functioning and psychiatric symptoms among military men and women exposed to sexual stressors. *Military Medicine*, *172*, 718–725.
- Muris, P., Roelofs, J., Rassin, E., Franken, I., & Mayer, B. (2005). Mediating effects of rumination and worry on the links between neuroticism, anxiety and depression. *Personality and Individual Differences*, *39*, 1105–1111.
- Nolan, S. A., Roberts, J. E., & Gotlib, I. H. (1998). Neuroticism and ruminative response style as predictors of change in depressive symptomatology. *Cognitive Therapy and Research*, *22*, 445–455.
- Norman, W. T. (1963). Toward an adequate taxonomy of personality attributes: Replicated factor structure in peer nomination personality ratings. *Journal of Abnormal and Social Psychology*, *66*, 574–583.
- O'Connor, D. B., & O'Connor, R. C. (2004). Perceived changes in food intake in response to stress: The role of conscientiousness. *Stress and Health: Journal of the International Society for the Investigation of Stress*, *20*, 279–291.
- Ouma, J. A., Chappelle, W. L., & Salinas, A. (2011). *Facets of occupational burnout among U.S. Air Force active duty and National Guard/reserve MQ-1 predator and MQ-9 reaper operators*. AFHRL Technical Report # AFHRL-SA-WP-TR-2011-0003, Wright-Patterson AFB, OH.
- Parasuraman, S., & Cleek, M. A. (1984). Coping behaviors and managers' affective reactions to role stressors. *Journal of Vocational Behavior*, *24*, 179–193.
- Parkes, K. R. (1990). Coping, negative affectivity, and the work environment: Additive and interactive predictors of mental health. *Journal of Applied Psychology*, *75*, 399–409.

- Pavalko, E. K., Mossakowski, K. N., & Hamilton, V. J. (2003). Does perceived discrimination affect health? Longitudinal relationships between workplace discrimination and women's physical and emotional health. *Journal of Health and Social Behavior, 44*, 18–33.
- Perrewé, P. L., & Spector, P. E. (2002). Personality research in the organizational sciences. In G. R. Ferris and J. J. Martocchio (Eds.), *Research in personnel and human resources management* (pp. 1-63). Oxford, England: Elsevier Science.
- Perrewé, P. L., Brymer, R. A., Stepina, L. P., & Hassell, B. L. (1991). A causal model examining the effects of age discrimination on employee psychological reactions and subsequent turnover intentions. *International Journal of Hospitality Management, 10*(3), 245–260.
- Perry, S. J., Witt, L. A., Penney, L. M., & Atwater, L. (2010). The downside of task-oriented leadership: The role of personality in subordinate exhaustion. *Journal of Applied Psychology, 95*, 1145–1153.
- Pierce, J. L., & Gardner, D. G. (2004). Self-esteem within the work and organizational context: A review of the organizational-based self-esteem literature. *Journal of Management, 30*, 591–622.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology, 88*, 879–903.
- Preacher, K. J., & Hayes, A. F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behavior Research Methods, Instruments, and Computers, 36*, 717–731.

- Preacher, K. J., Rucker, D. D., & Hayes, A. F. (2007). Addressing Moderated Mediation Hypotheses: Theory, Methods, and Prescriptions. *Multivariate Behavioral Research*, 42(1), 185–227.
- Rhoades, L., & Eisenberger, R. (2002). Perceived organizational support: A review of the literature. *Journal of Applied Psychology*, 87(4), 698–714
- Robbins, J. M., Ford, M. T., & Tetrick, L. E. (2012) Perceived unfairness and employee health: A meta-analytic integration. *Journal of Applied Psychology*, 97, 235–272.
- Rosen, L. N., & Martin, L. (1998). Incidence and perceptions of sexual harassment among male and female U.S. Army soldiers. *Military Psychology*, 10, 239–257.
- Rosenfeld, P., Thomas, M. D., Edwards, J. E., Thomas, P. J., & Thomas, E. D. (1991). Navy research into race, ethnicity, and gender issues: A historical review. *International Journal of Intercultural Relations*, 15, 407–426.
- Rotundo, M., Nguyen, D., & Sackett, P. (2001). A meta-analytic review of gender differences in perceptions of sexual harassment. *Journal of Applied Psychology*, 86(5), 914–922.
- Ryan, R. M., & Deci, E. L. (2000). Self-Determination Theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55, 68–78.
- Saks, A. M. (2006). Antecedents and consequences of employee engagement. *Journal of Managerial Psychology*, 21, 600–619.
- Saucier, G. (1992). Openness versus intellect: Much ado about nothing? *European Journal of Personality*, 6, 381–386.
- Saucier, G., & Goldberg, L. R. (2001). Lexical studies of indigenous personality factors: Premises, products, and prospects? *Journal of Personality*, 69, 847–879.

- Schaufeli, W. B., & Bakker, A. B. (2004). Job demands, job resources, and their relationship with burnout and engagement: a multi-sample study. *Journal of Organizational Behavior, 25*, 293–315.
- Schmidt, F. L., & Hunter, J. E. (1992). Development of causal models of processes determining job performance. *Current Directions in Psychological Science, 1*, 89–92.
- Schneider, B., & Reichers, A. (1983). On the etiology of climates. *Personnel Psychology, 36*, 19–39.
- Schneider, T. R. (2004). The role of neuroticism on psychological and physiological stress responses. *Journal of Experimental Social Psychology, 40*, 795–804.
- Schulte, M., Ostroff, C., & Kinicki, A. (2006). Organizational climate systems and psychological climate perceptions: A cross-level study of climate-satisfaction relations. *Journal of Occupational and Organizational Psychology, 79*, 654–671.
- Smith, T. W., Pope, M. K., Rhodewalt, F., & Poulton, J. L. (1989). Optimism, neuroticism, coping, and symptom reports: An alternative interpretation of the Life Orientation Test. *Journal of Personality and Social Psychology, 56*(4), 640–648.
- Sobel, M. E. (1982). Asymptotic confidence intervals for indirect effects in structural equations models. In S. Leinhardt (Ed.), *Sociological methodology* (pp. 290–312). San Francisco: Jossey-Bass.
- Sobel, M. E. (1986). Some new results on indirect effects and their standard errors in covariance structure models. In N. Tuma (Ed.), *Sociological methodology* (pp. 159–186). Washington, DC: American Sociological Association.

- Sorenson, R. C., Mangione-Lambie, M. G., & Luzio, R. C. (1998). Solving the chronic problem of sexual harassment in the workplace: An empirical study of factors affecting employee perceptions and consequences of sexual harassment. *California Western Law Review*, *34*, 457–491.
- Spector, P. E. (2003). Individual differences in health and well-being in organizations. In D. A. Hofmann & L. E. Tetrick (Eds.), *Health and safety in organizations: A multilevel perspective* (pp. 29–55). San Francisco: Jossey-Bass.
- Spector, P. E., Jex, S. M., & Chen, P. Y. (1995). Relations of incumbent affect-related personality traits with incumbent and objective measures of characteristics of jobs. *Journal of Organizational Behavior*, *16*, 59–65.
- Spector, P. E., Zapf, D., Chen, P., & Frese, M. (2000). Why negative affectivity should not be controlled in job stress research: Don't throw the baby out with the bath water. *Journal of Organizational Behavior*, *21*, 79–95.
- Stockdale, M. S., Visio, M., & Batra, L. (1999). The sexual harassment of men: Evidence for a broader theory of sexual harassment and sex discrimination. *Psychology, Public Policy, and Law*, *5*, 630–664.
- Street, A. E., Gradus, J. L., Stafford, J., & Kelly, K. (2007). Gender differences in experiences of sexual harassment: Data from a male-dominated environment. *Journal of Consulting and Clinical Psychology*, *75*, 464–474.
- Street, A., Vogt, D., & Dutra, L. (2009). A new generation of women veterans: Stressors faced by women deployed to Iraq and Afghanistan. *Clinical Psychology Review*, *29*, 685–694.
- Tett, R. P., & Burnett, D. D. (2003). A personality trait-based interactionist model of job performance. *Journal of Applied Psychology*, *88*, 500–517.

- Thacker, R., & Gohmann, S. (1993). Male/female differences in perceptions and effects of hostile environment sexual harassment: 'Reasonable' assumptions? *Public Personnel Management, 22*(3), 461–472.
- Truhon, S. A. (2008). Equal opportunity climate in the United States military: Are differences in the eye of the beholder? *European Journal of Work and Organizational Psychology, 17*, 153–169.
- Tupes, E. C., & Christal, R. E. (1961). Recurrent personality factors based on trait ratings (USAF WADC Tech. Note No. 61–97). Lackland Air Force Base, TX: US Air Force.
- U.S. Merit Systems Protection Board. (1988). *Sexual harassment in the federal government: An update*. Washington, DC: U.S. Government Printing Office.
- van Knippenberg, D. (2000). Work motivation and performance: A social identity perspective. *Applied Psychology: An International Review, 49*, 357–371.
- Van Yperen, N. W., & Snijders, T. A. B. (2000). A multilevel analysis of the demands-control model: Is stress at work determined by factors at the group level or the individual level? *Journal of Occupational Health Psychology, 5*, 182–190.
- Vogt, D., Pless, A. P., King, L. A., & King, D. W. (2005). Deployment stressors, gender, and mental health outcomes among Gulf War veterans. *Journal of Traumatic Stress, 18*, 272–284.
- Vollrath, M., & Torgersen, S. (2000). Personality types and coping. *Personality and Individual Differences, 29*, 367–378.
- Walsh, B. M., Matthews, R. A., Tuller, M. D., Parks, K. M., & McDonald, D. P. (2010). A multilevel model of the effects of equal opportunity climate on job satisfaction in the military. *Journal of Occupational Health Psychology, 15*, 191–207.

- Wiggins, J., & Trapnell, P. D. (1997). Personality structure: The return of the Big Five. In R. Hogan, J. Johnson, & S. Briggs (Eds.), *Handbook of personality psychology*, (pp. 737–765). San Diego: Academic Press.
- Williams, L. J., Cote, J. A., & Buckley, M. R. (1989). Lack of method variance in self-reported affect and perceptions at work: Reality or artifact. *Journal of Applied Psychology*, *74*, 462–468.
- Willness, C., Steel, P., & Lee, K. (2007). A meta-analysis of the antecedents and consequences of workplace sexual harassment. *Personnel Psychology*, *60*, 127–162.
- Witt, L. A., & Ferris, G. R. (2003). Social skill as moderator of the conscientiousness-performance relationship: Convergent results across four studies. *Journal of Applied Psychology*, *88*, 809–821.
- Witt, L. A., Burke, L. A., Barrick, M. R., & Mount, M. K. (2002). The interactive effects of conscientiousness and agreeableness on job performance. *Journal of Applied Psychology*, *87*, 164–169.
- Xanthopoulou, D., Bakker, A. B., Demerouti, E., & Schaufeli, W. B. (2007). The role of personal resources in the job demands-resources model. *International Journal of Stress Management*, *14*, 121–141.
- Xanthopoulou, D., Bakker, A. B., Dollard, M. F., Demerouti, E., Schaufeli, W. B., Taris, T. W., & Schreurs, P. J. G. (2007). When do job demands particularly predict burnout? The moderating role of job resources. *Journal of Managerial Psychology*, *22*, 766–786.
- Xanthopoulou, D., Bakker, A. B., Demerouti, E., & Schaufeli, W. B. (2009). Reciprocal relationships between job resources, personal resources, and work engagement. *Journal of Vocational Behavior*, *74*, 235–244.

Zellars, K. L., Hochwarter, W. A., Perrewé, P. L., Hoffman, N., & Ford, E. W. (2004).

Experiencing job burnout: the roles of positive and negative traits and states. *Journal of Applied Social Psychology, 34*(5), 887–911.

Zohar, D. (1997). Predicting burnout with a hassle-based measure of role demands. *Journal of Organizational Behavior, 18*, 101–115.



Table 1

*Means, Standard Deviations, Intercorrelation Matrix, and Reliability Estimates.*

Variable	Mean	StD	1	2	3	4	5	6	7	8
01. Emotional exhaustion	3.15	1.06	[.92]							
02. Task-oriented leadership	3.66	1.02	-.34**	[.94]						
03. LEOB	4.46	0.69	-.21**	.25**	[.88]					
04. Unit cohesion	3.95	1.06	-.27**	.39**	.33**	[.92]				
05. Emotional stability	3.31	0.82	-.48**	.26**	.10	.16*	[.73]			
06. Conscientiousness	3.95	0.62	-.09	.34**	.24**	.24**	.28**	[.70]		
07. Gender	1.23	0.42	-.01	-.06	-.04	-.10	-.02	.07		
08. Age	2.54	0.95	-.11	-.06	-.04	-.06	.20**	.09	-.05	
09. Rank	2.41	1.24	-.03	.02	.03	.07	.16*	.08	.04	.48**

*Note.* N = 256; reliability estimates ( $\alpha$ ) are reported in brackets along the diagonal. \*  $p < .05$ . \*\*  $p < .01$ .

Table 2.

*Hierarchical Linear Modeling Results.*

Variable	b	Standard Error	t
<u>Step One</u>			
Intercept	3.268**	.250	13.04
Emotional stability	-.650**	.075	-8.58
Conscientiousness	.096	.097	.99
Rank	.058	.054	1.08
Gender	-.089	.139	-.64
Age	-.056	.071	-.79
<u>Step Two</u>			
Intercept	3.442**	.247	13.91
Emotional stability	-.578**	.074	-7.77
Conscientiousness	.218*	.096	2.27
Rank	.075	.052	1.45
Gender	-.159	.135	-1.18
Age	-.103	.069	-1.49
Task-oriented leadership	-.291**	.059	-4.93

\*  $p < .05$ . \*\*  $p < .01$ .

Table 2, Continued.

Variable	b	Standard Error	t
<u>Step Three</u>			
Intercept	3.464 <sup>**</sup>	.245	14.14
Emotional stability	-.578 <sup>**</sup>	.073	-7.85
Conscientiousness	.260 <sup>**</sup>	.096	2.70
Rank	.080	.051	1.56
Gender	-.175	.134	-1.30
Age	-.110	.068	-1.60
Task-focused Leadership	-.263 <sup>**</sup>	.059	-4.42
LEOB	-.215 <sup>*</sup>	.083	-2.59
<u>Step Four</u>			
Intercept	3.530 <sup>**</sup>	.237	14.88
Emotional Stability	-.528 <sup>**</sup>	.072	-7.27
Conscientiousness	.246 <sup>**</sup>	.094	2.62
Rank	.064	.050	1.27
Gender	-.178	.130	-1.37
Age	-.098	.066	-1.47
Task-oriented leadership	-.285 <sup>**</sup>	.058	-4.91
LEOB	-.304 <sup>**</sup>	.084	-3.62
Task-oriented leadership x LEOB	-.292 <sup>**</sup>	.074	-3.94

\*  $p < .05$ . \*\*  $p < .01$ .

Table 2, Continued.

Variable	b	Standard Error	t
<u>Step Five</u>			
Intercept	3.571**	.237	15.04
Emotional stability	-.522**	.071	-7.26
Conscientiousness	.272**	.093	2.92
Rank	.081	.049	1.62
Gender	-.211	.130	-1.62
Age	-.114	.066	-1.72
Task-oriented leadership	-.244**	.059	-4.08
LEOB	-.248**	.085	-2.89
Cohesion	-.147*	.057	-2.55
Task-oriented leadership x LEOB	-.276**	.073	-3.76

\*  $p < .05$ . \*\*  $p < .01$ .

Table 2, Continued.

Variable	b	Standard Error	t
<u>Step Six</u>			
Intercept	3.587**	.238	15.01
Emotional stability	-.516**	.071	-7.19
Conscientiousness	.283**	.093	3.03
Rank	.079	.049	1.60
Gender	-.202	.130	-1.55
Age	-.113	.067	-1.68
Task-oriented leadership	-.249**	.060	-4.13
LEOB	-.218*	.090	-2.43
Cohesion	-.194**	.064	-3.01
Task-oriented leadership x LEOB	-.228**	.082	-2.76
Task-oriented leadership x Cohesion	-.087	.047	-1.85
Cohesion x LEOB	.003	.070	.04

\*  $p < .05$ . \*\*  $p < .01$ .

Table 2, Continued.

Variable	b	Standard Error	t
<u>Step Seven</u>			
Intercept	3.599**	.237	15.14
Emotional stability	-.507**	.071	-7.13
Conscientiousness	.299**	.092	3.23
Rank	.082	.049	1.66
Gender	-.179	.129	-1.39
Age	-.112	.066	-1.68
Task-oriented leadership	-.220**	.060	-3.61
LEOB	-.205*	.089	-2.31
Cohesion	-.201**	.063	-3.15
Task-oriented leadership x LEOB	-.309**	.088	-3.51
Task-oriented leadership x Cohesion	-.116*	.048	-2.41
Cohesion x LEOB	-.098	.080	-1.23
Task-oriented leadership x LEOB x Cohesion	-.147*	.059	-2.49

\*  $p < .05$ . \*\*  $p < .01$ .

Table 3

*Simple Slopes*

Slope	Gradient	<i>t</i> -value	Percent (%) Difference in Criterion <sup>a</sup>
1. High-LEOB, high-cohesion	-.79	-6.62 <sup>**</sup>	128
2. High-LEOB, low-cohesion	-.22	-2.07 <sup>*</sup>	39
3. Low-LEOB, high-cohesion	.12	1.08	4
4. Low-LEOB, low-cohesion	.06	0.36	2

Note: Slope numbers correspond to group numbers in Figure 1. <sup>\*\*</sup>  $p < .01$ , <sup>\*</sup>  $p < .05$ .

<sup>a</sup> Percent difference in standard deviation units of emotional exhaustion between low (-1SD) to high (+1SD) values of task-oriented leadership.

Table 4.

*Slope Difference Tests*

Group	<i>t</i>
1 and 2	-3.105**
1 and 3	-3.691**
1 and 4	-4.657**
2 and 3	-1.051
2 and 4	-1.760
3 and 4	-0.260

Note: Group (pairs of slopes) numbers correspond to slope numbers in Figure 1 (Group 1 = high-LEOB, high-cohesion; Group 2 = high-LEOB, low-cohesion; Group 3 = low-LEOB, high-cohesion; Group 4 = low-LEOB, low-cohesion). \*\*  $p < .01$ , \*  $p < .05$ . Slope difference tests were calculated with Dawson and Richter's (2006) recommendations.



Figure 1.

*Emotional Exhaustion Regressed on Task-Oriented Leadership at Low and High Levels of Leader Equal Opportunity Behaviors and Unit Cohesion.*

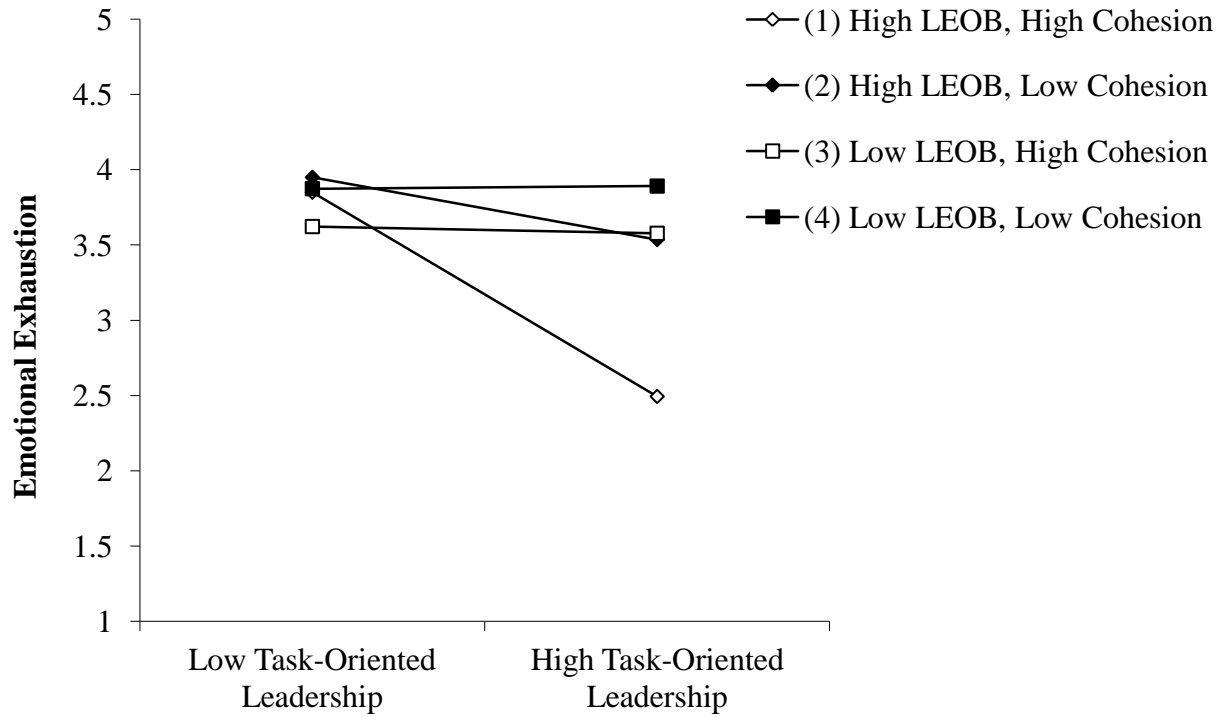


Table 5.

Descriptive Statistics, Intercorrelation Matrix, and Reliability ( $\alpha$ ) Estimates

	Mean	StD	1	2	3	4	5	6	7	8	9	10
1. Emotional exhaustion	3.16	1.05	[.92]									
2. EO climate	1.81	.66	.31**	[.91]								
3. POS	3.19	.92	-.56**	-.47**	[.92]							
4. Conscientiousness	3.91	.63	-.11**	-.18**	.18**	[.72]						
5. Emotional stability	3.24	.78	-.46**	-.22**	.31**	.32**	[.73]					
6. Rank	2.35	1.33	-.06**	-.17**	.12**	.11**	.13**	---				
7. Age	2.42	.98	-.11**	-.09**	.06**	.11**	.12**	.55**	---			
8. Minority status	1.39	.48	-.04*	.08**	-.01	-.07**	.06**	-.12**	.01	---		
9. Gender	1.17	.37	-.01	-.02	-.00	.07**	-.05**	.04*	.03	.06**	---	
10. Discrimination	.27	.72	.20**	.48**	-.33**	-.03	-.13**	-.08**	-.04*	.03	.07**	---
11. Sexual harassment	.07	.25	.12**	.34**	-.18**	-.01	-.08**	-.05	-.03	.01	.11**	.39**

Note: N = 2,897; reliability estimates ( $\alpha$ ) are reported in brackets along the diagonal. \*  $p < .05$ . \*\*  $p < .01$ .

Table 6.

*Mediator Variable Model: POS Regressed on the Predictors.*

Predictor	B	SE	t
Constant	-.082	.069	-1.182
EO climate	-.483**	.026	-18.239
Emotional stability	.204**	.020	10.051
EO climate x Emotional stability	-.051	.027	-1.903
Conscientiousness	.082**	.024	3.360
EO climate x Conscientiousness	-.300**	.033	-9.016
Emotional stability x Conscientiousness	.092**	.028	3.267
EO climate x Emotional stability x Conscientiousness	-.117**	.037	-3.140
Rank	.020	.013	1.544
Age	-.018	.017	-1.084
Minority status	.052	.029	1.753
Gender	.005	.038	0.146
Experienced discrimination	-.166**	.023	-7.138
Sexual harassment	.036	.061	0.590

Note:  $R^2 = .32$ ,  $F(13/2883) = 104.63$ .

Table 7.

*Dependent Variable Model: Emotional Exhaustion Regressed on the Predictors.*

Predictor	B	SE	t
Constant	3.454 <sup>**</sup>	.073	47.030
POS	-.485 <sup>**</sup>	.020	-23.489
EO climate	.053	.029	1.792
POS x Emotional stability	-.036	.023	-1.551
POS x Conscientiousness	-.113 <sup>**</sup>	.031	-3.644
POS x Emotional stability x Conscientiousness	-.068 <sup>*</sup>	.029	-2.313
Emotional stability	-.469 <sup>**</sup>	.022	-21.282
EO climate x Emotional stability	.051	.032	1.585
Conscientiousness	.162 <sup>**</sup>	.026	6.104
EO climate x Conscientiousness	.034	.039	.879
Emotional stability x Conscientiousness	.076 <sup>*</sup>	.031	2.466
EO climate x Emotional stability x Conscientiousness	-.017	.044	-.385
Rank	.060	.013	4.432
Age	-.098 <sup>**</sup>	.018	-5.421
Minority status	-.025	.031	-.801
Gender	-.121 <sup>**</sup>	.040	-3.022
Experienced discrimination	-.002	.024	-.097
Sexual harassment	.058	.064	.905

Note:  $R^2 = .44$ ,  $F(17/2879) = 130.97$ .

Table 8.

*Conditional Indirect Effects of POS at Low, Average, and High Levels of Emotional Stability and Conscientiousness.*

Emotional Stability	Conscientiousness	Effect	Boot SE	Boot LLCI	Boot ULCI
Low	Low	.130	.021	.092	.175
Low	Average	.202	.019	.165	.242
Low	High	.284	.031	.225	.349
Average	Low	.121	.019	.086	.164
Average	Average	.234	.018	.200	.270
Average	High	.375	.027	.323	.430
High	Low	.112	.029	.062	.180
High	Average	.269	.028	.216	.326
High	High	.479	.035	.411	.552

Note: LLCI = Lower Limit Confidence Interval; ULCI = Upper Limit Confidence Interval.

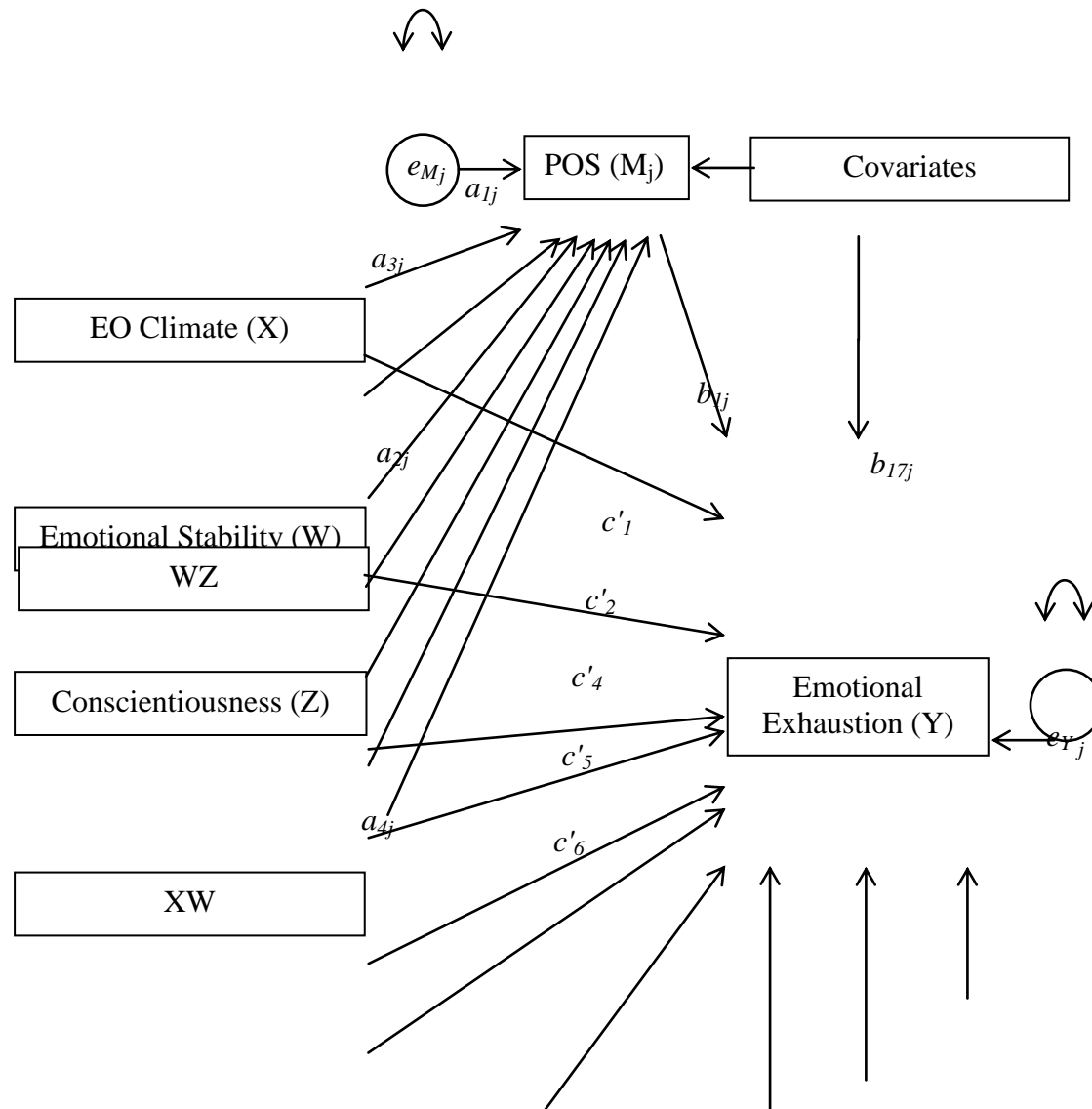
Table 9.

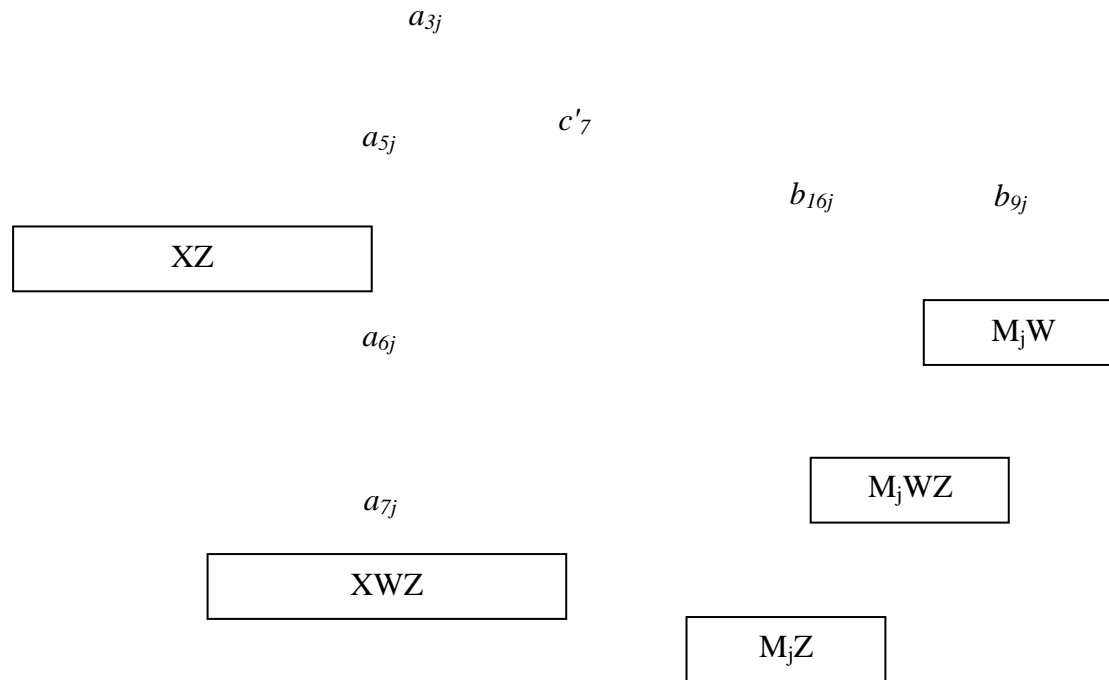
*Conditional Direct Effects of EO climate at Low, Average, and High Levels of Emotional Stability and Conscientiousness.*

Emotional Stability	Conscientiousness	Effect	SE	t
Low	Low	-.017	.042	-.406
Low	Average	.013	.036	.361
Low	High	.043	.051	.836
Average	Low	.031	.038	.816
Average	Average	.053	.029	1.792
Average	High	.074	.038	1.925
High	Low	.079	.061	1.306
High	Average	.092*	.041	2.237
High	High	.106*	.047	2.242

Figure 2.

*Proposed Structural Model.*





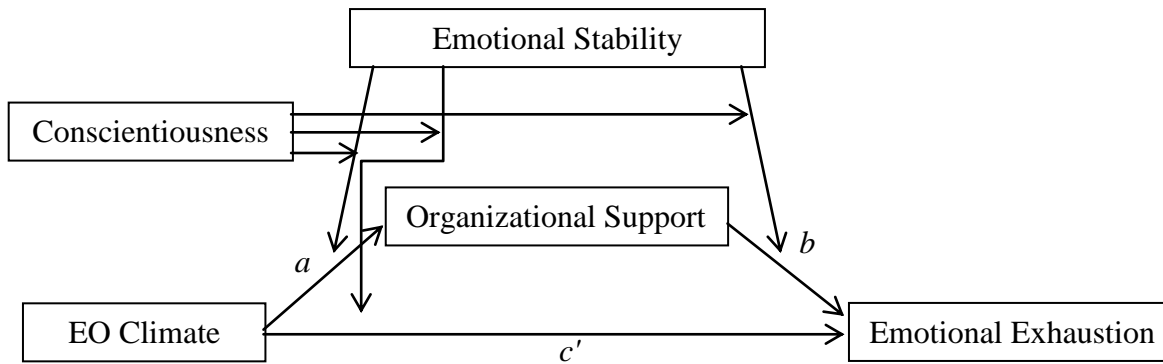

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Note: Covariates = Gender, age, rank, minority status, experienced discrimination, and experienced sexual harassment. Conditional indirect effect of  $X$  on  $Y$  through  $Mj = (a_{1j} + a_{4j}W + a_{5j}W + a_{7j}WZ) (b_{1j} + b_{9j}W + b_{16j}Z + b_{17j}WZ)$ . Conditional direct effect of  $X$  on  $Y = c'_{1j} + c'_{4j}W + c'_{5j}Z + c'_{7j}WZ$ .



Figure 3.

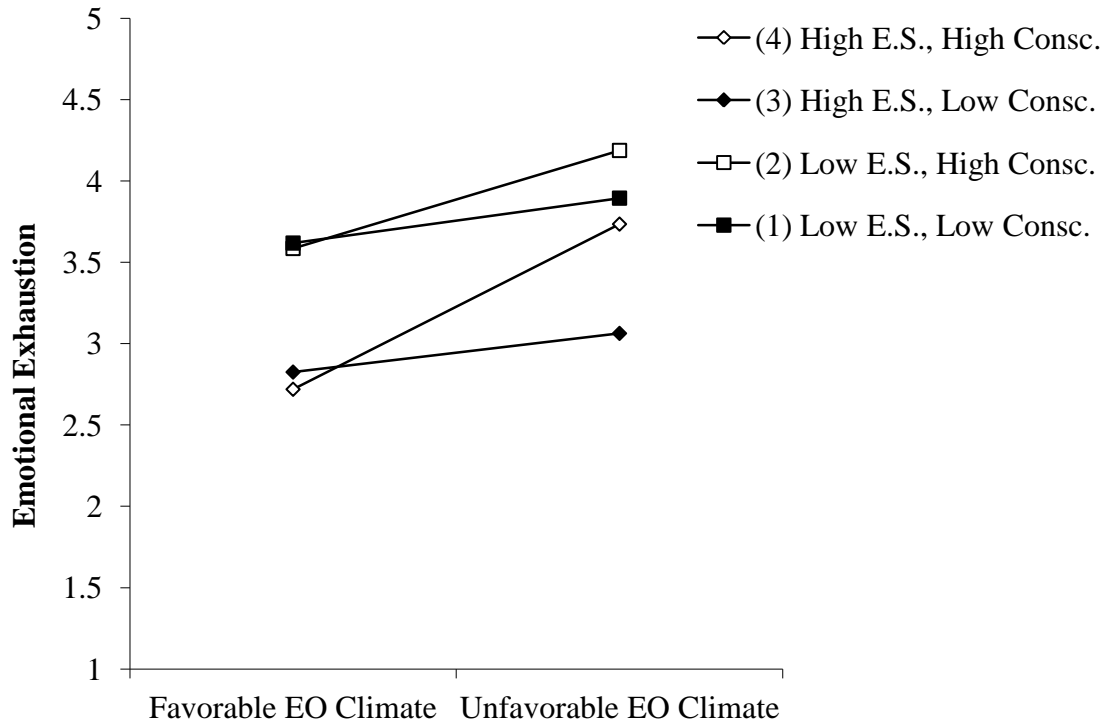
*Proposed Conceptual Model.*



Note: The total effect (*c*) is not represented for purposes of conceptual clarity.

Figure 4.

*Conditional Indirect Effect of EO Climate on Emotional Exhaustion through POS.*



Note: E.S. = emotional stability; Consc. = conscientiousness.