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# Fired up or burned out? Exploring the effects of leadership challenge demands on leadership behaviors through engagement and burnout

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# FIRED UP OR BURNED OUT? EXPLORING THE EFFECTS OF LEADERSHIP CHALLENGE DEMANDS ON LEADERSHIP BEHAVIORS THROUGH ENGAGEMENT AND BURNOUT

by

Stephen Hyrum Courtright

An Abstract

Of a thesis submitted in partial fulfillment of the requirements for the Doctor of Philosophy degree in Business Administration (Management and Organizations) in the Graduate College of The University of Iowa

May 2012

Thesis Supervisor: Associate Professor Amy E. Colbert

## ABSTRACT

Leadership research has traditionally explored the consequences of leadership behaviors while giving far less attention to understanding why leaders behave the way they do toward subordinates. Moreover, the few theoretical frameworks and studies that do address antecedents of leadership behavior have focused almost entirely on personality and other individual differences while largely overlooking situational determinants, particularly proximal situational determinants that would help explain why a variety of leadership behaviors exist at varying levels in the same organization. To fill these gaps in theory and research, this dissertation proposes that leaders' job demands may serve as a proximal situational determinant of "constructive" and "destructive" forms of leadership. Specifically, by integrating transactional stress theory and the challenging job assignments model, I introduce the construct of *leadership challenge demands* and propose a theoretical model that depicts the process whereby leadership challenge demands come to influence three types of leadership behavior: transformational leadership, abusive supervision, and passive leadership. In essence, the model depicts two competing reactions that leaders may have to leadership challenge demands. On one hand, leaders high on leadership self-efficacy are proposed to react favorably to leadership challenge demands through feelings of engagement and therefor exhibit transformational leadership. On the other hand, leaders low in leadership self-efficacy are proposed to react negatively to leadership challenge demands through feelings of burnout and therefore exhibit passive leadership or abusive supervision. The hypothesized model was tested in a sample of 153 managers and 631 direct reports at a *Fortune 500* company. Results showed that while leadership challenge demands are

related to higher engagement and thereby related to transformational leadership, leaders low in LSE react to leadership challenge demands with high burnout and consequently engage in passive leadership. Hypotheses regarding abusive supervision were not supported. All these results held after controlling for relevant dispositional, demographic, and experience-oriented factors. This study thus contributes to theory and research on leadership behavior, leadership development, and work stress by linking leadership challenge demands to leadership behaviors, illustrating the dual nature of developmental leadership challenges, identifying self-efficacy as a moderator of challenge demands, and exploring motivation and stress in the leadership role. It further suggests that organizations should be cautious about giving "stretch" assignments to leaders before they feel confident in their leadership ability.

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PH.D. THESIS

This is to certify that the Ph.D. thesis of

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# CHAPTER I

## INTRODUCTION

Scholars have sought for decades—even centuries—to understand the effects of leadership on people in organizations (House & Aditya, 1997; Yukl, 2009). Years of research on this topic has yielded an array of profound insights and implications. Yet, for all the scholarship done to date on *consequences* of leadership behaviors, far less work has focused on understanding *antecedents* to leadership behavior. What are the factors that drive leaders to behave the way they do toward subordinates? Given the paucity of research that addresses this question, scholars have sounded calls for more research that identifies antecedents to leadership behavior (Bass, 1999; Bommer, Rubin, & Baldwin, 2004; Tepper, 2007). Indeed, only by understanding the determinants of certain leadership behaviors can organizational scientists and practitioners hope to foster constructive leadership practices in organizations, and perhaps just as importantly, prevent destructive forms of leadership (Einarsen, Aasland, & Skogstad, 2007).

An axiom of organizational science is the notion that work behavior is a function of both the person and the situation (Lewin, 1951). However, in terms of identifying causes of leadership behavior, the existing research is strikingly unbalanced in terms of its near-exclusive focus on individual difference predictors of leadership behavior. Studies in this regard have focused in large part on constructs such as personality (e.g., Judge & Bono, 2000) and motivation to lead (e.g., Chan & Drasgow, 2001). However, research linking personality and other individual differences to specific leadership behaviors has still left much variance unexplained. For example, a meta-analysis by Bono and Judge (2004) found multiple correlations of .31 and .17 between the Big Five

personality traits and transformational leadership and passive leadership behaviors, respectively. Although these findings do lend some support for a trait-based perspective to leadership, they also lend credence to the notion that leadership behaviors "are more malleable, more transient, and less trait-like than one might otherwise believe" (Bono & Judge, 2004, p. 906) and, hence, can be influenced by situational factors. Indeed, a lack of attention to situational influences of leadership behavior could very well account, at least in part, for the some of the variance left unexplained by dispositional approaches to leadership behavior (Johns, 2006).

Researchers are thus beginning to give increased theoretical consideration to situational factors that may influence leadership behavior, though empirical work in this area is exceedingly limited. For example, a theoretical framework advanced by Walter and Bruch (2009) introduced several categories of antecedents to transformational leadership. One of these categories was contextual antecedents, which included social characteristics (peer transformational leadership: Bommer et al., 2004), organizational characteristics (organizational structure: Sarros, Tanewski, Winter, Santora, & Densten, 2002; Shamir, Goldberg-Weill, Breinin, Zakay, & Popper, 2000), crisis situations (House, Spangler, & Woycke, 1991), and national culture (Javidan & Carl, 2004). Tepper (2007) proposed a similar antecedent framework in the realm of abusive supervision, with contextual antecedent categories in his model including organizational-level factors, industry effects, and cultural factors.

While these existent frameworks on antecedents of leadership behaviors represent a step in the right direction toward understanding why leaders behave the way they do, the frameworks do share a couple of common weaknesses. First, when proposing various

contextual influences of leadership behavior, the frameworks center almost entirely on distal predictors that abide at the organizational level or beyond. Such a perspective, however, assumes that leadership behavior is relatively homogenous within the same organization, an assumption that may not necessarily hold true and that essentially ignores meaningful variance in leadership behavior. Similarly, another weakness of these frameworks is their focus on predicting only one specific type of leadership behavior (i.e., transformational leadership or abusive supervision) rather than a variety of different leadership behaviors. Given these shortcomings, I argue that examining proximal rather than distal situational predictors of leadership behaviors may yield insights as to why a range of leadership behaviors—such as transformational, passive, or abusive leadership—can exist at varying levels within a single organization. Moreover, examining proximal predictors of leadership behavior can also yield significant practical insights since proximal environmental factors are often more malleable than distal factors.

## Job Demands as an Antecedent of Leadership Behavior

Beginning over 40 years ago, theorists have suggested that job demands are an important proximal feature of a leaders' environment that have the potential to influence leadership behavior. For starters, role theory (Kahn, Wolfe, Quinn, Snoek, & Rosenthal, 1964; Katz & Kahn, 1964) suggests that understanding a person's role in an organization and the demands that stem from these roles is central to understanding employee behavior in organizations. Applying this notion to the realm of leadership, Mintzberg (1972) argued that leaders' work is enormously complex because leaders must fill multiple organizational roles simultaneously. Specifically, using observation research

techniques, Mintzberg identified three broad roles that leaders fill in organizations: interpersonal (i.e., a figurehead and leader), information-processing (i.e., a monitor and disseminator of information), and decision-making roles (i.e., defining and executing strategy). Mintzberg further noted that leadership work is both qualitatively and quantitatively different from individual contributor work. Thus, leaders face somewhat different role requirements than individual contributors.

Building off role theory and Mintzberg's (1972) work, Stewart (1976) argued that leaders' unique roles in the organization bring about a set of demands that are likewise unique to leaders. These demands stem primarily from the fact that leaders have to establish relationships with multiple constituencies, including subordinates, peers, superiors, and external contacts. Moreover, based on observations and interviews with leaders, Stewart found that there are differences in both the types of demands that leaders face as well as the intensity of these demands across leaders at the same hierarchical level in a single organization. Ultimately, Stewart (1976) argued that leaders' demands will impact the way leaders think, feel, and behave.

Finally, Hambrick, Finkelstein, and Mooney (2005) most recently proposed a theory regarding the consequences of job demands for organizational executives (i.e., CEOs). Their theory argues that executive demands—defined as the degree to which a given organizational executive experiences his or her job as difficult or challenging—arise primarily from task-related factors, such as performance expectations, stakeholder pressures, and the number of decisions a leader is called on to make. These demands, in turn, impact leadership behaviors. For example, executives who face heavy demands are predicted to place greater pressures on the people whom they lead.

Taken together, the theories put forth by Mintzberg (1972), Stewart (1976), and Hambrick et al. (2005) were intended to serve as a call for research which (a) focuses on the demands that leaders specifically face, and (b) examines the degree to which these leadership demands trigger various leadership behaviors. Unfortunately, calls for research on either of these issues have gone largely unheeded. The few studies that do exist on leaders' job demands lack in at least two ways. First, rather than focusing on demands that emerge from roles specific to leaders, past studies focus on job demands that are generalizeable to both supervisory and nonsupervisory workers (e.g., time pressures, amount of time spent at work), while ignoring certain demands that are more specific to leaders (e.g., dealing with subordinates or enacting change). Second, rather than investigating how job demands affect behaviors that are specific to leaders (i.e., leadership behaviors), past studies only investigate the extent to which job demands affect outcomes that are likewise applicable to both supervisory and nonsupervisory workers. These outcomes include job satisfaction (Bogg & Cooper, 1995; Cavanaugh, Boswell, Roehling, & Boudreau, 2000; Jannsen, 2001; Leong, Furnham, & Cooper, 1996), job search behavior (Bingham, Boswell, & Boudreau, 2005; Bretz, Boudreau, & Judge, 1994; Cavanaugh et al., 2000), and mental and physical health (Bogg & Cooper, 1995). Thus, leaders' job demands have been examined only in the sense that organizational managers constituted a given sample in a study of work stress, rather than as a way to understand how job demands specific to leaders influence outcomes likewise specific to leaders (e.g., leadership behavior). Hence, there is a need for empirical research that identifies job demands specific to leaders (i.e., leadership demands) and that, in turn, shows how these demands affect leadership behavior.

There is likewise a need for clarifying and extending the theories by Mintzberg (1972), Stewart (1976), and Hambrick et al. (2005). For example, none of the theories expounded by these scholars specify the types of leadership behaviors that will be impacted by job demands, nor do they give attention to the processes whereby job demands come to influence leadership behaviors. Rather, they mention in very general terms that job demands will affect the way that leaders behave toward and treat subordinates. Thus, there is a need to develop more robust theory regarding the effects of leadership demands on specific leadership behaviors and to explain the process by which such relationships occur.

Accordingly, the overarching purpose of this research is to introduce and test a theoretical model regarding leaders' proximal job demands and their effects on three leadership behaviors: transformational leadership, abusive supervision, and passive leadership. To develop the model, I draw from and integrate a number of different theories and literatures that otherwise tend to remain separate. For example, the leadership development literature—and specifically the challenging job assignments model—has come the furthest in conceptualizing and operationalizing leadership demands, whereas leadership and stress research has focused very little on demands specific to leaders. On the other hand, the leadership development literature has up to this point ignored the effects of leadership demands on leadership behaviors discussed in traditional leadership theory and research. Moreover, leadership development research has failed to explicate the processes by which leadership demands can affect leadership behavior, which are instead covered extensively in organizational stress theories—particularly the transactional theory of stress (Lazarus & Folkman, 1984). In this sense,

one of the key theoretical contributions of this research is to integrate these various perspectives into a theoretical model that explains how leadership demands can impact a wide range of leadership behaviors—in particular, transformational, passive, and abusive leadership behaviors—through two different mechanisms—engagement and burnout. The model which I develop for this research is shown in Figure 1 and is briefly explained below. More extensive explanations of my research model, including justification for my choice of constructs and the theoretical underpinnings of the relationships proposed in the model, are provided in Chapter 2.

## Theoretical Model

My theoretical model begins by introducing and explaining the construct of *leadership challenge demands*. To do this, I draw on leadership development research by McCauley and colleagues (McCauley, Ruderman, Ohlott, & Morrow, 1994; McCauley, Ohlott, & Ruderman, 1999), who, over the last two decades, have empirically identified aspects of leaders' proximal work environment that provide challenge and thereby promote managerial learning and personal gains. These so-called *challenging job assignments* include creating change, managing boundaries, having a high level of responsibility, and dealing with diversity. I argue that these challenging job assignments are equivalent to transactional stress theory's notion of *challenge demands*—defined as those job demands that are generally appraised as having the potential to promote learning, personal growth, and future gains (Cavanaugh et al., 2000; LePine, Podsakoff, &LePine, 2005; Crawford, LePine, & Rich, 2010)—only that challenging job assignments reflect challenge demands specific to leaders. By bringing these two otherwise separate perspectives together and identifying two other challenge demands

specific to leaders (managing deep-level diversity and developing followers), the construct of leadership challenge demands is developed.

After introducing the leadership challenge demands construct, the remainder of the research model depicts the process whereby leadership challenge demands are proposed to affect leadership behaviors. This process is based for the most part on transactional stress theory (Lazarus & Folkman, 1984), which I review briefly in this chapter and cover more extensively in the chapter that follows. Transactional stress theory proposes that individuals confronted with challenge demands judge their ability to cope with the demands, and these judgments of perceived coping capabilities—most especially judgments of self-efficacy (Bandura, 1986; Perrewé & Zellars, 1999)—interact with challenge demands to spark certain affective-motivational states. Specifically, those who perceive themselves as capable of carrying out the functions necessary to meet challenge demands experience positive emotions and a heightened sense of energy, whereas those who feel personally incapable of meeting the demands experience negative emotions and a strong sense of energy depletion. These affective-motivational responses then trigger different coping behaviors (Compas, Connor-Smith, Saltzman, Thomsen, & Wadsworth, 2001; Connor-Smith &Flachsbart, 2007). Specifically, positive emotions and heightened energy lead to engagement coping behavior, or behaviors aimed at mastering the demands such as generating new solutions, implementing solutions, soliciting advice from others, staying on task, and seeking closeness with others. Conversely, negative emotions and energy depletion lead to negative emotion-focused behaviors, defined as a loss of personal control that translates

into hostility toward others, or broad disengagement coping, defined as behavior aimed at orienting oneself away from demands through avoidance and withdrawal.

In applying the transactional stress model to the current research, I propose that leadership challenge demands have the potential to trigger two different affective-motivational states: engagement and burnout (Crawford et al., 2010). Engagement is defined as a persistent and positive affective-motivational state characterized by feelings of vigor, dedication, and absorption (Schaufeli, Salanova, Gonzalez-Roma, & Bakker, 2002). Burnout, on the other hand,is defined as a prolonged state of psychological strain and depletion of energy resources characterized by emotional exhaustion and cynicism (Maslach, 1976). Consistent with transactional stress theory, I propose that the relative impact of leadership demands on engagement or burnout depends on a leader's leadership self-efficacy (LSE), defined as a leader's perceived ability to effectively perform functions that comprise leadership roles (Ng, Ang, & Chan, 2008). Specifically, leaders with high LSE experience strong feelings of engagement, whereas leaders low in LSE experience heightened feelings of burnout, as a result of leadership challenge demands. Engagement and burnout are then proposed to spark different leadership behaviors. The assumption made in this research is that leaders' stress coping behavior is reflected in their leadership behavior, and it is this assumption that guided my choice of leadership behaviors proposed as dependent variables. Specifically, transformational leadership is the leadership construct best reflective of engagement coping behaviors in that transformational leaders generate new ways of thinking about issues, solicit followers' suggestions and ideas, seek to form satisfying relationships with followers, and serve as role models in terms of organizing and executing tasks. Thus, feelings of engagement

will be positively related to transformational leadership. Conversely, burnout will be positively related to abusive supervision, defined as the sustained display of nonphysical yet hostile verbal and nonverbal behavior directed toward subordinates and reflective of negative emotion-focused coping, and passive leadership, defined as leader inaction and avoidance and reflective of broad disengagement coping behaviors. In the end, the relationships described above lead to a set of integrated frameworks reflecting LSE acting as a moderator on the mediated relationships between leadership challenge demands and transformational leadership (through engagement), abusive supervision (through burnout), and passive leadership (also through burnout). In other words, the integrated frameworks suggest that leaders who respond to leadership challenge demands through the engagement mechanism (via high LSE) will tend to be more transformational leaders. Conversely, leaders who respond to leadership challenge demands through the burnout mechanism (via low LSE) will tend to be abusive or passive leaders. The predictions noted above and the integrated frameworks thus represent, in their totality, the process by which leadership challenge demands—as a proximal situational antecedent—influence leadership behavior for "good: (i.e., transformational leadership) or "bad" (i.e., abusive, and passive leadership behaviors).

## Contributions of the Research

This research has the potential to make a number of contributions to leadership theory and research. To begin, this research is calculated, in a very broad sense, to serve as a step toward better understanding why leaders behave the way they do; indeed, it shifts the focus of leadership behavior as an *independent variable* to that of being a *dependent variable*. As noted above, very little theory and research exists on what causes

leadership behavior, particularly when it comes to identifying situational determinants of leadership. Although at least two theoretical frameworks have addressed antecedents to leadership behavior, to the extent that these frameworks address contextual antecedents, they focus almost entirely on distal predictors. This study is, therefore, one of the only ones to empirically examine a proximal situational antecedent of leadership behavior, and the first to examine how demands that leaders face in their jobs affect their leadership behaviors. Put simply, a focus on job demands as predictors of leadership behavior shifts our thinking about how "leaders make things happen" to how "things make leaders happen" (Bolman & Deal, 1991). The advantage of studying leadership challenge demands as a potential situational predictor of leadership behavior is that it can prove useful to organizations who, based on the findings of this research, can modify aspects of leaders' proximal environment in order to foster "constructive" leadership practices while preventing "destructive" forms of leadership from happening (Einarsen et al., 2007).

However, besides identifying a proximal situational antecedent of leadership behavior, a unique theoretical contribution of this research rests in the notion that leadership challenge demands can potentially elicit both constructive (transformational leadership) and destructive leadership behaviors (abusive supervision, passive leadership). In particular, while the existing theoretical frameworks on antecedents to leadership focus on how multiple contextual factors influence one type of leadership behavior, an important theoretical contribution of the current research is that a single contextual antecedent (i.e., leadership challenge demands) may predict multiple types of leadership behavior (i.e., transformational, passive, and abusive leadership) within the same organization depending on leaders' affective-motivational reactions to the demands

(engagement or burnout). In essence, the notion of one antecedent predicting a range of constructive and destructive leadership behaviors presents a novel and interesting approach to examining determinants of leadership behavior in that it moves toward a more holistic, yet complex, consideration of how situational antecedents affect leadership behavior.

Of course, how challenge demands impact leadership behaviors depends on whether leaders feel engaged or burned out in response to the demands. In this regard, an important empirical contribution of this research is linking the constructs of engagement and burnout with leadership behaviors. The vast majority of work done on engagement and burnout has focused on non-managerial employees (Maslach, Schaufeli, &Leiter, 2001). Indeed, it is interesting that while several studies exist demonstrating the effects of leadership on subordinates' engagement and burnout (e.g., De Hoogh, Annebel, & Den Hartog, 2009), rarely have studies examined engagement or burnout that leaders experience themselves. Researchers have long noticed the potential for burnout among managers given the frequency of interpersonal contact and the multifaceted demands involved in managerial work (Cordes & Dougherty, 1993). However, the studies that currently exist on managerial burnout either focus on the relative prevalence of burnout between managerial and nonmanagerial employees (Pretty, McCarthy, & Catano, 1992), the structure of the burnout construct (Cordes, Dougherty, & Blum, 1997) or on the effects of burnout on managers' well-being and other outcomes general to all types of workers (Lee & Ashforth, 1990, 1993). Likewise, research done on engagement in managerial samples has focused on the effects of engagement on well-being outcomes (Schaufeli, Bakker, & van Rhenen, 2009) or on clarifying the underlying structure of the

engagement construct (Schaufeli, Taris, & van Rhenen, 2008). Thus, this study fills a gap in the literature by examining engagement and burnout among leaders and linking it with outcomes more exclusive to leaders.

Up to this point, I have largely discussed the possible contributions of this research to leadership theory and research. However, my integration of the challenging job assignments model, transactional theory of stress, and leadership behavioral theories—done in an effort to explain the concept of leadership challenge demands and the mechanisms by which they will influence a range of leadership behaviors—may have a number of implications for not only the field of leadership, but also for theory and research on leadership development and work stress. First, in terms of contributing to theory on leadership development, McCauley and colleagues (1994, 1999) have come the furthest in identifying challenge demands of leaders, yet all of the work to date on challenging job assignments has focused on their effects on training and development outcomes such as learning and skill acquisition (DeRue & Wellman, 2009; Dragoni, Tesluk, Russell, & Oh, 2009; McCauley et al., 1994). Until now, however, they have not been linked to leadership behaviors discussed in traditional leadership research. In this sense, this study serves as a bridge between traditional leadership research and leadership development research. In addition, work by McCauley and colleagues, as well as those who have subsequently tested their model, has focused almost entirely on the positive effects of challenging job assignments. However, by drawing on transactional stress theory, I propose that there may be a so-called "dark side" to challenging job assignments (Rodell & Judge, 2009). This proposition in and of itself represents a critical and interesting contribution because it invites a more balanced view of the challenging job

assignments model and stimulates a broader set of research questions than has previously been the case with the model.

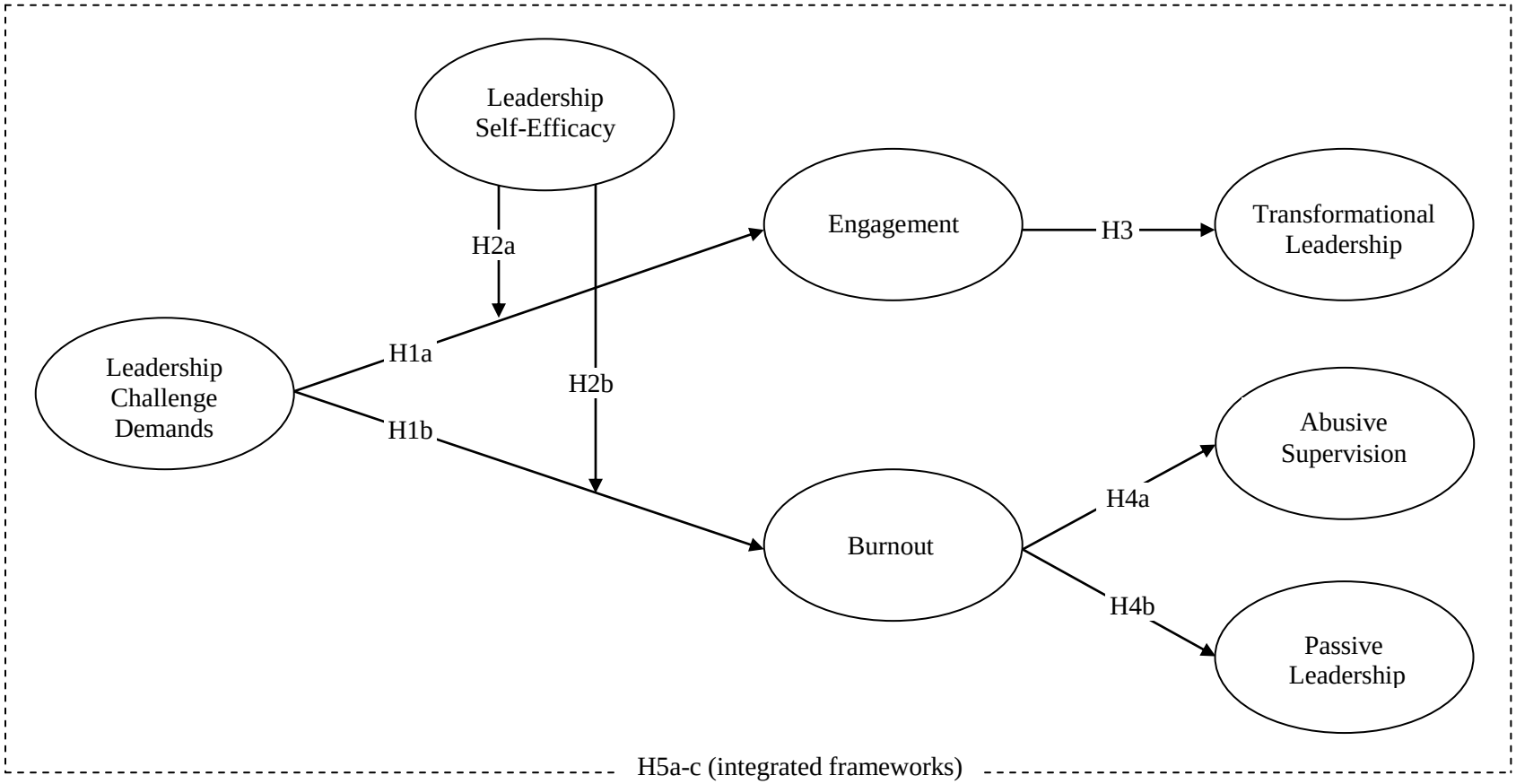
Second, in terms of how the current research influences the stress literature, the work on job demands has largely ignored the context specificity of job demands. For instance, although work by Mintzberg (1972), Stewart (1976), and others suggest that managers face unique demands compared to those faced by individual contributors, conceptualizations and operationalizations of job demands that take into account their context specificity are largely nonexistent in the stress literature. Thus, by integrating McCauley and colleagues' (1994, 1999) challenging job assignments model with the transactional theory of stress, this research provides insights regarding the implications of job demands for a wider range of work behaviors than has been previously considered by stress researchers (i.e., leadership behaviors). Similarly, a systematic study of leadership challenge demands opens up the possibility of examining the effects of job demands among a broader set of employees than has traditionally been done in the past. Indeed, most of the research on job demands has focused on lower-level employees in service industries such as health care, hospitality, or public service.

Yet another contribution to stress theory and research is found near the beginning of my model in which leadership demands are linked to either engagement or burnout, with these paths being moderated by LSE. Contemporary applications of transactional stress theory have largely ignored how individual judgments of self-efficacy interact with challenge demands to influence affective, motivational, and behavioral responses to challenge demands. Indeed, there is ample evidence to suggest that even so-called "good" stressors like challenge demands can trigger both positive and negative affective

responses, such as engagement and burnout (Crawford et al., 2010; Rodell & Judge, 2009). What is it that causes some people to react more positively to challenge demands while others react to the same demands quite negatively? Unfortunately, this question has not been adequately addressed in the stress literature. However, drawing further on transactional stress theory as well as social cognitive theory (Bandura, 1986), I propose that LSE is an important determinant of the degree to which a leader feels engaged or burned out from leadership challenge demands. The present study thus represents one of the first attempts to uncover the complexity of challenge demands and explain how self-efficacy influences individuals' reactions to challenge demands.

Having introduced in Chapter 1 the theoretical model and the contributions of this research, Chapter 2 will offer a review of the literatures relevant to this study and an explanation of my hypotheses. Finally, in Chapter 3, I will provide a description of the sample, methods, and analytic strategies used to test the hypotheses.

Figure 1. Theoretical Model




*Note.* Control variables include extraversion, neuroticism, total managerial experience, tenure with sponsoring organization, tenure in current management position, and various demographics (age, gender, level of education). Leadership demands, leadership self-efficacy, engagement, and burnout are rated by the leaders in my sample. The three leadership behaviors (transformational leadership, abusive supervision, and passive leadership) are rated by the leaders' direct reports.

# CHAPTER II

## LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

The purpose of this chapter is to review literatures relevant to the research questions explored in this dissertation, and to develop the hypotheses indicated in my theoretical model (Figure 1). As a beginning point to developing my set of hypotheses, it is necessary to introduce and explain the construct of leadership challenge demands. To do this, I will first review literature on current conceptualizations of job demands. In particular, I will devote attention to the way job demands are conceptualized in the challenge/hindrance demand framework, one of the main applications of transactional stress theory in organizational science. Based on this discussion, I will integrate the challenge/hindrance demand framework and the challenging job assignments model, and, in doing so, formally delineate the leadership challenge demands construct. After explaining this construct, I will draw on transactional stress theory, as well as engagement and burnout theories, to develop a set of competing arguments regarding the effects of leadership challenge demands on engagement and burnout. To shed light on these effects, I will then integrate social cognitive theory with the above theories to propose that leadership self-efficacy (LSE) determines leaders' affective-motivational reactions to leadership challenge demands. Specifically, leadership challenge demands should trigger heightened feelings of engagement for leaders who are high on leadership self-efficacy (LSE), whereas they will trigger burnout for leaders low on LSE. Then drawing further on the above literatures plus leadership theories regarding transformational leadership, passive leadership, and abusive supervision, I will propose that leaders high on engagement will be more prone to exhibit transformational

leadership behaviors, whereas burned out leaders will tend to display abusive and passive leadership behaviors. In the end, I will develop a set of integrated models wherein leadership challenge demands are predicted to influence transformational leadership through the engagement mechanism, and abusive or passive leadership through the burnout mechanism.

## Current Conceptualizations of Job Demands

Job demands have been a topic of research for many years, though much more clarity has come to the construct in recent years. In particular, conceptualizations of job demands—and theory regarding their effects—have been significantly informed by the transactional theory of stress (Lazarus & Folkman, 1984) and its subsequent applications in the work stress literature (Cavanaugh et al., 2000; Crawford et al., 2010; LePine et al., 2005; Podsakoff, LePine, & LePine, 2007).

At the most basic level, role theory (Kahn et al., 1964; Katz & Kahn, 1978) suggests that job demands emerge from the roles that organizational members occupy. Roles are defined as positions within a social framework that entail a set of activities to be done. The demands emerging from members' roles represent proximal features of one's environment and, according to role theory, help explain behavior in organizations. In this vein, much effort has been expended to define job demands and to explain their effects on employee behavior. Up until a decade ago, most definitions of job demands centered around two notions: (a) that job demands reflect features in one's environment, and (b) that demands are inherently negative and induce strain. For example, Karask (1979) argued that job demands such as having to work fast, juggling a high workload, and facing conflicting demands essentially represent job characteristics whose primary

effects are mental strain (though he proposed that these negative effects could be mitigated by granting workers more decision latitude). Hobfoll (1989) took Karasek's conceptualization a step further by suggesting that demands in any form are generally perceived to be negative primarily because they deplete personal resources (Lee & Ashforth, 1996). Demerouti, Bakker, Nachreiner, and Schaufeli's (2001) conceptualization of job demands in their job demand-resource theory mirrored that of Hobfoll's when they defined demands as "those physical, social, or organizational aspects of the job that require sustained physical or mental effort and are therefore associated with certain physiological and psychological costs (e.g., exhaustion)" (p. 501). Indeed, job demand-resource theory hinged on the assumption that job demands primarily lead to higher burnout and lower engagement.

The first theme woven in these early conceptualizations of job demands—namely, that job demands reflect features in one's environment—has been widely supported in the literature. Most well-accepted models of work stress, including the transactional theory of stress, emphasize the distinction between demands and stress, noting that stress is not found in job demands per se, but, rather, that stress reflects the overall the process by which individuals appraise and then psychologically and behaviorally respond to demands (Cooper, Dewe, & O'Driscoll, 2001; Griffin & Clarke, 2010). For this reason, *job demands* are used synonymously with the term *job stressors* to connote the fact that demands are features of one's proximal environment that can cause stress rather than representing stress itself (LePine et al., 2005).

Conversely, the notion that job demands primarily induce strain has not been as well received by scholars, particularly in the last decade. For example, Cavanaugh et al.

(2000) noted that many studies showed little to no relationship between job demands and work outcomes. The reason behind these small relationships, they argued, was that researchers were viewing job demands as a unidimensional construct rather than differentiating demands based on the type of demand (Selye, 1976). Put simply, they argued that not all job demands are equal, and rather than reflecting a unidimensional construct, job demands should be thought of as multidimensional in nature depending on how these demands are generally perceived by individuals. In this vein, Cavanaugh et al. (2000) drew on Lazarus and Folkman's (1984) transactional theory of stress to propose the first multidimensional model of job demands.

Transactional stress theory proposes that the first step in the stress process is an appraisal of whether the environmental demands that one faces are significant for one's well-being. This is called the *primary appraisal*, and primary appraisals are argued to take two forms: threatening or challenging. Threat (i.e., hindrance) appraisals mean that the individual anticipates the demand will inflict personal harm or loss, whereas challenge appraisals mean that the individual anticipates the demand to result in learning and future benefits. How individuals make challenge or hindrance appraisals has been the main question of interest when it comes to applying transactional stress theory to the workplace. Lazarus and Folkman's (1984) original formulation of transactional stress theory emphasized that primary appraisals are based entirely on the characteristics of the individual making the appraisal. In contrast, Brief and George (1991, 1995) argued that Lazarus and Folkmans' focus on intraindividual processes of primary appraisals ignores "those working conditions that are likely to affect the well-being of *most* workers" (p. 16). They further argued that work contexts tend to evoke generally consistent economic

meanings to individuals, and, as a result, individuals in the same organization will be fairly consistent in their primary appraisals of certain demands. In other words, certain job demands are appraised overall as challenging, whereas other demands are generally appraised as threatening.

Based on Lazarus and Folkman's (1984) distinction between challenge and threat appraisals as well as Brief and George's (1991, 1995) arguments regarding a fair level of consistency of these primary demand appraisals across individuals, Cavanaugh et al. (2000) delineated two different types of job demands to which individuals are exposed in organizations. One set of job demands was labeled *hindrance* demands and were defined as those demands which, by and large, are perceived as threatening because they thwart goal accomplishment, learning, and personal growth. Common hindrance demands include role conflict and role ambiguity (Rizzo, House, & Lirtzman, 1970). In contrast, another set of stressors was labeled *challenge* demands and were defined as those demands which are generally appraised as having the potential to bring about learning, personal growth, and future benefits. Challenge demands include high job responsibility, time urgency, and high workload. Cavanaugh et al. believed that challenge demands would lead mainly to positive-valenced work outcomes, whereas hindrance demands would lead mainly to negative-valenced work outcomes. In a large sample of U.S. managers, Cavanaugh et al. found empirical support for the two-factor model of job demands. Specifically, they demonstrated evidence for the discriminant validity of challenge and hindrance demands, and found that while challenge demands were positively related to managers' job satisfaction and negatively related to job search activity, the opposite patterns of relationships were found for hindrance demands. These

results were later replicated by Boswell, Olson-Buchanan, and LePine (2004) in a sample of lower-level employees.

Further evidence for the discriminant validity of challenge and hindrance demands was garnered from meta-analyses by Lepine et al. (2005), Podsakoff et al. (2007), and Crawford et al. (2010). Crawford et al.'s meta-analysis was particularly helpful in demonstrating the importance of distinguishing between challenge and hindrance stressors. Specifically, they conducted a meta-analytic test of job demands-resources theory (Demerouti et al., 2001) and questioned the theory's assumptions regarding the overall negative effects of job demands on engagement and positive effects of job demands on burnout. The crux of their argument was that the job demand-resource model fails to account for the distinction between challenge and hindrance demands, but that by taking this distinction into consideration, challenge demands could actually be shown to have positive effects on employee engagement. Support for this notion was found in their meta-analysis. Challenge demands exhibited positive relationships with engagement whereas hindrance demands exhibited negative relationships with engagement. Crawford et al. thus demonstrated the importance of distinguishing between challenge and hindrance stressors by showing that relationships between job demands and criteria of interest vary depending on the type of demand being assessed.

Nevertheless, it is interesting to note that rather than showing that challenge demands "will generally associate with positive work outcomes" (Cavanaugh et al., p. 66), Crawford et al.'s meta-analysis also showed that challenge demands exhibit nearly equal positive effects on burnout as on engagement. This finding was somewhat parallel to Lepine et al.'s (2005) meta-analytic results, which showed that challenge demands can

either increase performance through heightened motivation or, conversely, decrease performance through increased strain. Podsakoff et al. (2007) similarly demonstrated that challenge demands were positively correlated with not only strain, but also work attitudes (job satisfaction, organizational commitment). Finally, a recent experience sampling study by Rodell and Judge (2009) found that challenge stressors caused some people to be more attentive at work and therefore display more citizenship behavior, whereas for other people, challenge demands led to more anxiety and, hence, to more counterproductive work behaviors. This led Rodell and Judge to argue that even so-called "good" stressors (i.e., challenge demands) can spark either "good" or "bad" behaviors depending on the psychological responses they trigger. This nuanced pattern of relationships, as will be noted below, deserves further consideration.

**Summary and Future Directions**

In sum, research supports the multidimensionality of the job demands construct in terms of there being two main types of job demands: challenge and hindrance. Furthermore, hindrance demands are associated with negative work outcomes (higher burnout, lower engagement, lower performance), whereas challenge demands are associated with both positive *and* negative work outcomes (i.e., higher burnout, higher engagement, and higher or lower performance).

Given the complex nature of relationships evoked by challenge demands, researchers have noted the need to identify factors that determine people's responses to challenge demands (Griffin & Clarke, 2010). In other words, a critical next step in the literature would be to identify the conditions under which challenge demands trigger positive vs. dysfunctional affective-motivational and behavioral responses. Perhaps even

more important than unpacking the complexity of challenge demands is the need to consider the context specificity of the job demands construct. For example, although Cavanaugh et al. (2000) initiated scholarship on the challenge/hindrance framework using a large sample of U.S. managers, the items used to initially capture challenge demands were not specific for leaders. In fact, existing job demands scales in the traditional work stress literature all appear to measure demands that are general to a wide range of jobs and positions in an organization while ignoring the fact that the nature of demands likely differ across certain types of jobs. This is particularly true when it comes to leadership. Indeed, the lack of systematic attention to the demands of leadership represents, in my assessment, a critical omission in both the leadership and the stress literatures because it is clear that leaders' roles and demands differ from those of individual contributors (Mintzberg, 1972; Stewart, 1976). As such, we would expect a potential difference in the level, breadth, and type of demands that leaders (vs. non-leaders) face. Moreover, a focus on demands specific to leaders may shed light on a broader set of workplace behaviors that can be predicted by challenge demands—namely, leadership behaviors—than has previously been considered (Griffin, Neal, & Parker, 2007; Welbourne, Johnson, & Erez, 1998).

All in all, the literature review above suggests a need for scholars to (a) understand the complex relationships between challenge demands and workplace behaviors; (b) direct attention to identifying job demands that are specific for leaders; and (c) tie these leader-specific demands to work behaviors likewise specific to leaders. Accordingly, I have made a deliberate choice to focus mainly on challenge demands faced by leaders—which from henceforth are referred to as *leadership challenge*

*demands*—and to examine how leadership challenge demands impact transformational, abusive, and passive leadership behaviors through their relative effects on engagement and burnout. In the exploratory analyses discussed in Chapter 4, I will also examine how hindrance demands such as role conflict and role ambiguity influence these leadership behaviors through engagement and burnout.

## Defining Leadership Challenge Demands

It is no secret that leadership is a challenging undertaking, as evidenced by popular-press books such as *The Leadership Challenge* (Kouzes & Posner, 2002). However, besides an occasional remark concerning the challenges of leadership, leadership theory and research has almost entirely ignored leadership demands in their theorizing and development of research models. This research thus serves as a critical step forward in terms of developing more fully the concept of leadership challenge demands. To do this, I draw on and integrate a variety of perspectives—including role theory, leadership behavior paradigms and, most especially, work in the leadership development arena on challenging job assignments—to introduce the concept of leadership challenge demands. Role theory and leader behavior paradigms will be used to discuss the overall concept and the necessary characteristics of leadership challenge demands. The challenging job assignments model will then be used to identify specific leadership challenge demands.

### Characteristics of Leadership Challenge Demands

Based on my literature review in the previous section, I propose that three basic requirements must be met in order for a demand to be considered a *leadership challenge demand*. First, the demand must obviously meet the basic definition of any job

demand—that is, a proximal environmental job feature that arises from the roles that organizational members occupy (Cooper et al., 2001; Griffin & Clark, 2010). Second, the demand should be challenging, meaning that it should generally be perceived as providing opportunities for growth and future benefits (Cavanaugh et al., 2000). Finally, the demand should be as specific as possible for leaders, meaning that the demand should arise from roles specific for leadership. In this regard, it will help to gain a better understanding of the roles that leaders fill in organizations.

Given the diversity of leadership positions both within and across organization, it is difficult to classify all of the many roles that leadership entails. As noted in Chapter 1, Mintzberg (1972) argued that organizational leaders fill three distinct, higher-order roles: interpersonal, decision-making, and information-processing. Prior to Mintzberg, Hemphill (1959) conducted extensive job analyses on thousands of managers all over the world and uncovered a number of leadership duties and responsibilities. These included tasks such as supervising subordinates, planning and organizing project and change efforts, making decisions, monitoring the environment, controlling, representing the group and negotiating with outsiders, coordinating with people inside and outside the company, consulting and introducing new techniques or technologies, and basic administering of activities. Both of these taxonomies are quite extensive in their identification of leadership roles and responsibilities, and they obviously differ in several ways. Yet, as noted below, it is possible to achieve convergence and identify a broad set of roles that leaders occupy in organizations.

In particular, one way to achieve convergence in the various roles of leadership is to examine broad types of leadership behaviors that leaders display. For example, role

theory suggests that roles are determined in large part by the expected behaviors of those who fill the roles (Katz & Kahn, 1978). Indeed, roles themselves essentially constitute a set of expected behaviors and can be used as a basis for identifying and classifying job responsibilities and demands (Ilgen & Hollenbeck, 1992; Stewart, 1976; Van Dyne, Cummings, & Parks, 1995). In this vein, Yukl (2009) and DeRue, Nahrgang, Wellman, and Humphrey (2011) argue that all leadership behaviors can be grouped in at least one of three large metacategories: task-oriented, relational-oriented, and change-oriented behaviors. Task-oriented behaviors are concerned largely with getting a task accomplished efficiently and reliably. Relational-oriented behaviors reflect the "people" side of leadership and refer to efforts to build relationships with followers. Change-oriented behaviors are concerned with implementing changes in products, processes, or strategies. Given these meta-categories of leadership behavior and the fact that roles constitute a set of expected behaviors, it would appear likely that leadership roles can likewise be classified into three meta-categories: task, relational, and change-oriented roles. In fact, the roles and responsibilities highlighted in Mintzberg's (1972) and Hemphill's (1959) taxonomies can easily be classified as either task, relational, or change-oriented roles. As such, we would expect leadership demands to be either task-, relational-, or change-oriented in nature.

Unfortunately, researchers who have examined challenge demands in managerial samples have treated challenge demands as if leaders only fill task-oriented roles. For example, the Cavanaugh et al. (2000) measure asked managerial respondents to indicate the amount of time pressures they face, the amount of time spent at work, and the volume of work a person has to accomplish in an allotted time. While these items do begin to tap

leadership challenge demands, they are primarily task-oriented demands and are not necessarily specific to leaders. There is thus a need for identifying a set of demands that are not only challenging and geared more specifically toward leaders, but that also include relational and change-oriented demands (Bingham et al., 2005). To do this, I next turn to the leadership development literature concerning challenging job assignments. As will be noted below, I argue that the challenging job assignments model captures in large part the various task, relational, and change-oriented challenge demands that leaders face.

**Challenging Job Assignments Model**

For almost two decades, McCauley and her colleagues (1994, 1999) have sought to identify challenging features of managers' jobs that promote the opportunity and motivation for leadership development and personal growth. The uniqueness of their approach in comparison to other leadership development approaches is that it "is based on the premise that on-the-job learning is most likely to occur when managers are faced with challenging job situations" (McCauley et al., 1994, p. 544). McCauley et al. have thus been concerned with identifying features of leaders' jobs that are developmental in the sense that they present challenging situations and ultimately promote managerial learning, personal growth, and personal gains. Features of leaders' job that provide challenge are referred to as *developmental componentsof managerial jobs* or, in a more abbreviated form, *challenging job assignments*. In using the term *assignments*, however, Ohlott (2004) is quick to point out that *assignments* do not necessarily mean formal assignments, but simply the aspects of leaders' jobs that are challenging.

McCauley et al. (1994) argue that challenging job assignments represent proximal features of a managers' job, rather than "other aspects of the work environment, such as organizational context and the macroenvironment outside of the organization, [that] can also contribute to development" (p. 544). Moreover, the key element of challenging job assignments is that they present *challenge*; that is, they involve leaders confronting "a challenging situation full of problems to solve, dilemmas to resolve, obstacles to overcome, and choices to make under conditions of risk and uncertainty" (Ohlott, 2004, p. 154). Finally, challenging job assignments "stem from the roles, responsibilities, tasks, and context of the job" (Ohlott, 2004, p. 154) and therefore encompass the set of demands (task, relational, change) that characterize leadership work.

What, then, are some specific challenging job assignments? Qualitative and quantitative research by McCauley and colleagues (1994, 1999) has identified five broad challenging job assignments that have been found to be developmental and related to managerial learning. These components are creating change, high levels of responsibility, managing boundaries, dealing with diversity, and job transitions. McCauley and colleagues have captured these five dimensions in a measurement scale called the *Job Challenge Profile* (JCP). The scale was developed based on extensive interviews with hundreds of lower-level supervisors, middle managers, and executives working in a wide variety of organizations and organizational functions (McCall, Lombardo, & Usher, 1988), and has been used in subsequent research on challenging job assignments (DeRue & Wellman, 2009; Dragoni et al., 2009). In the present study, I review the JCP in an effort to show that each of its dimensions reflect one or more of the demands that leaders face (i.e., task, relational, change-oriented).

The first dimension of the challenging job assignments model is *creating change*. A leader whose job requires creating change may be mandated to start something new in the organization; make strategic changes in a group's structure, technology, or operations; launch new product lines, plans and functions; or create new policies and procedures. Creating change can also involve fixing problems created by a predecessor or dealing with employees who are resistant to change. Creating change promotes learning and growth in that it requires the leader to "think outside the box" and make decisions that entail a degree of risk and uncertainty. Creating change also involves dealing with a high level of complexity, and can thus teach leaders lessons about effectively delegating and shouldering responsibilities, managing priorities, and how to motivate others to buy into a vision and embrace change. Finally, successfully creating change can perhaps more than anything else propel a leader to higher status in the organization and invite opportunities for recognition and rewards.

The next dimension of the challenging job assignments model is *high levels of responsibility*. This refers to the degree that a leader's job involves a large scale and scope of responsibilities and stewardships, deadlines and pressures from superiors, high visibility, and high-stakes decision making. For example, leaders with a high level of responsibility may be in charge of multiple functions, projects, technologies, direct reports, or client bases. A high level of responsibility often brings with it a constant sense of pressure. It also forces managers to make critical decisions under pressure while also pushing them to think strategically and become adaptable. As with creating change, a high level of responsibility can bring benefits such as increased visibility, recognition,

and status. Moreover, it provides leaders the opportunity to have a significant impact on the organization.

*Managing boundaries* is the third dimension of the challenging job assignments model, and refers to a leader being required to work laterally across various groups of people both within and outside the organization in order to build relationships, scout necessary information, and garner support for group or organizational initiatives (Druskat & Wheeler, 2003). In this sense, leaders who manage boundaries must interface and negotiate with people over whom they have no formal authority and whose interests are not always congruent with their own. Managing boundaries brings with it a great deal of external pressure from other groups both inside and outside the organization (i.e., suppliers, customers, government agencies, unions). At the same time, it creates opportunities for learning about building relationships, handling conflict, and being assertive in negotiations. Moreover, boundary spanning brings about both personal and organizational benefits such as expanded social networks (Seibert, Kraimer, & Liden, 2001) and increased group effectiveness (Faraj & Yan, 2009; Marrone, 2010), each of which can enhance leaders' image and success.

The fourth dimension of the challenging job assignments model is *managing diversity*. Particularly in today's workplaces, managers are often required to manage and develop direct reports of both genders and various racial and ethnic backgrounds. They must also increasingly manage people of different ages and generations. One of the challenges of managing diversity is getting people with different demographics to work together. For example, research shows that demographic "faultlines" can emerge in demographically diverse groups (Lau & Murnighan, 1998, 2005; Li & Hambrick, 2005),

and leaders must therefore be vigilant in preventing demographically-based factions from forming in the groups they lead. At the same time, managing diversity enables leaders to gain new perspectives and insights about personal and workplace issues. It also allows leaders to learn new methods of communicating and connecting with others. Finally, one of the main benefits of managing diversity includes greater creativity and innovation, thereby allowing the leader's efforts to be noticed and recognized by others (Pearsall, Ellis, & Evans, 2008; van Knippenberg, De Dreu, & Homan, 2004).

The final dimension of the challenging job assignments model is *job transitions*, or the degree to which a leader is experiencing changes either in job content or in the level and scope of his or her responsibilities. Conceptually, job transitions essentially place leaders in new and often unfamiliar situations that require leaders to think of new and creative ways for responding to problems and opportunities and accomplishing goals. They also frequently require leaders to prove themselves to people with whom they may not have prior experience. In this sense, job transitions are argued to promote challenge and learning by providing leaders with opportunities to think creatively and prove themselves as competent. However, the way that the job transitions dimension is measured in the *Job Challenge Profile* is unfortunately not totally congruent with the notion of challenging job assignments representing proximal features of managers' jobs. For example, items such as "You lack experience important to carrying out some aspect of your job" or "Others question whether you are 'ready' for this job" tend to ask leaders more about *themselves* and their own personal experience rather than about challenging features of their *jobs*. Thus, in keeping with my focus on leadership challenge demands

as reflecting proximal aspects of leader's jobs, I have chosen to exclude job transitions from my theoretical and empirical analysis.

It has generally been argued that the components of the challenging job assignments model outlined above are indicators of a higher-order reflective construct representing the overall challenge of a leader's job (McCauley et al., 1994; Dragoni et al., 2009). DeRue and Wellman (2009) found support for this notion by demonstrating through confirmatory factor analysis that all the challenging job assignment dimensions load on a single higher-order factor representing the overall level of challenge inherent in a leader's job.

That said, empirical research on challenging job assignments is surprisingly rare; in fact, only a handful of empirical studies which deal with challenging job assignments have appeared in scholarly journals. However, the studies that have been done are largely supportive of the ability of challenging job assignments to promote learning and development. McCauley et al. (1994) found that challenging job assignments translated into high levels of on-the-job learning and overall leader development. Dragoni et al. (2009) found that challenging job assignments helped managers obtain certain leadership competencies such as broad business knowledge, insightfulness, and cross cultural sensitivity beyond the effects of leadership tenure. In a similar fashion, DeRue and Wellman (2009) demonstrated that challenging job assignments helped managers learn competencies such as critical thinking, information gathering, operational analysis, social perceptiveness, and problem solving. However, DeRue and Wellman did find that extremely high levels of challenge could inhibit leaders from obtaining these competencies.

**Integrated View of Leadership Challenge Demands**

By integrating the challenging job assignments model and my prior discussion on what constitutes leadership challenge demands, it is fairly easy to see that leadership development scholars' notion of challenging job assignments essentially represent leadership challenge demands. First, challenging job assignments meet the basic definition of job demands in that they represent features of one's proximal work environment that stem from leadership roles and responsibilities. Indeed, as noted above, McCauley et al. (1994) conceptualize challenging job assignments as proximal features of leaders' jobs, rather than characteristics of leaders' macro environment. Second, challenging job assignments are precisely that—challenging. Recall that challenge demands are defined as those demands that "employees tend to perceive as opportunities to learn, achieve, and demonstrate the type of competence that tends to get rewarded" (Crawford et al., 2010, p. 836). This definition reflects the main notion of McCauley et al.'s (1994) model, which is that challenging job assignments reflect "challenging features of jobs that stimulate on-the-job learning" (McCauley et al., 1999, p. 4), and also the fact that learning from challenging situations invites personal growth and the opportunity to demonstrate competence (Ohlott, 2004). Indeed, empirical research has shown that challenging job assignments do in fact translate into higher levels of learning and, furthermore, that they allow leaders the opportunity to demonstrate leadership competencies (DeRue & Wellman, 2009; Dragoni et al., 2009; McCauley et al., 1994, 1999).

Finally, challenging job assignments are specific for leaders and arise from one or more of the task, relational and change-oriented roles and demands that govern leadership

work. For example, managing diversity tends to be a very relational-oriented demand. Creating change is more of a change-oriented demand, although dealing with change-averse employees adds a relational component to creating change as well. Managing boundaries encompasses both relational and task demands, whereas high level of responsibility appears to primarily be a task-oriented demand. It should be noted that there is quite a bit of overlap between high level of responsibility and commonly discussed challenge demands such as workload, time urgency, and job responsibility (Crawford et al., 2010). However, a key strength of the challenging job assignments model is that it takes into account a broader range of proximal job demands than is typically considered, while at the same time identifying challenge demands that are unique to leadership roles and responsibilities. Thus, taken as a whole, challenging job assignments are reflective of one or more of the task, relational, and change-oriented roles that leaders fill and the subsequent task, relational, and change-oriented demands that they face.

In sum, the arguments above suggest that challenge demands at the leader level are manifested in large part by the dimensions outlined in the Job Challenge Profile. This integration of transactional stress theory and the challenging job assignments model not only guides our measurement of leadership challenge demands, but more importantly, opens the path toward developing theory regarding job demands as a proximal situational antecedent of leadership behavior. Moreover, it helps to extend theory on organizational stress by considering the context specificity of job demands, and focusing exclusively on challenge demands. Finally, it provides a framework for discussing how challenging features of leaders' jobs may not only result in so-called "good" affective-motivational

and behavior responses, but perhaps more interestingly, how they may trigger "negative" affective-motivational and behavioral responses as well (Rodell & Judge, 2009). Indeed, given that past research shows that challenge demands can have divergent effects on affective-motivational states and subsequent workplace behaviors (Crawford et al., 2010; LePine et al., 2005; Podsakoff et al., 2007), integrating the challenging job assignments model with transactional stress theory allows us to test how leadership challenge demands may affect leadership behavior for good (transformational leadership) or bad (passive or abusive leadership) depending on their relative impact on engagement and burnout.

In this vein, there is often an implicit assumption in the leadership development literature that challenging job assignments result primarily in positive work outcomes. Yet, most of the research done on challenging job assignments has been characterized by asking leaders to describe or rate past work experiences that typify challenging job assignments and assess whether these assignments did in fact lead to learning and skill acquisition (e.g., DeRue & Wellman, 2009; McCauley et al., 1994). Of course, not only are retrospective accounts of work experiences subject to memory and recall biases which will promote more positive evaluations of challenging job assignments, but they also potentially ignore the idea that some managers may actually respond quite negatively to challenging assignments and, in essence, "drop out of the race" either psychologically or behaviorally. Although DeRue and Wellman (2009) did detect a pattern of diminishing returns for the relationship between challenging job assignments and learning certain leadership skills, their study nevertheless did not directly investigate potential harmful effects of challenging job assignments.

Another critical gap in the research on challenging job assignments is that there has been no systematic attempt to link challenging job assignments to validated leadership behavior constructs discussed in mainstream leadership research. Rather, challenging job assignments research has focused on predicting learning outcomes. For example, Dragoni et al. (2009) and DeRue and Wellman (2009) focused on the effects of challenging job assignments on leadership *competencies*, which are generally defined as underlying characteristics such as abilities, skills, or a body of knowledge which one possesses and are used in carrying out certain leadership functions (Boyatzis, 1982; Mumford, Campion, & Morgeson, 2007). Although the leadership literature is undoubtedly benefited from an understanding of how leadership competencies are developed through challenging job assignments, focusing solely on competencies as outcomes of challenging job assignments may limit our knowledge of how challenging job assignments ultimately impact behaviors that leaders exhibit toward followers. Indeed,

> "Actions, their results, and the [competencies] being expressed do not necessarily have a one-to-one correspondence…The action, or specific behavior, is the manifestation of a competency in the context of the demands and requirements of a specific job…[Thus], a person's set of competencies reflect his or her capability. They are describing what he or she *can* do, not necessarily what he or she *does*" (Boyatzis, 1982, pp. 20, 23).

Given the distinctiveness of competencies and leadership behavior, a critical step forward is to investigate how challenging job assignments impact one's leadership behaviors. This will allow the challenging job assignments to take a stronger foothold in the leadership literature.

A final weakness of the challenging job assignments model is that certain key relational demands are fairly underrepresented. For example, within the *managing*

*diversity* component of the model, only managing demographic diversity (i.e., surface-level diversity) is taken into account. To many leadership researchers, this may appear as a seemingly incomplete picture of the relational demands that leaders face. For example, research points to the fact that besides managing surface-level diversity, *managing deep-level diversity*—that is, the challenge of managing people with different personalities, values, and skills—is a difficult yet often rewarding endeavor. Moreover, research shows that deep-level diversity tends to exhibit larger effects than demographic diversity on group functioning and performance (Bell, 2007; Harrison, Price, Gavin, & Florey, 2002). As such, one of the fundamental challenges of leadership is managing individuals who differ on deep-level attributes and motivating them to work cooperatively toward a common goal.

Another relational-oriented leadership challenge demand not accounted for in the challenging job assignments model, but is widely seen as a critical task of managers, is *developing followers* (McCall, 2010). More and more emphasis is being made on leaders developing their followers by acting both as mentors and coaches. Evidence suggests that mentoring, whether formal or informal, is a function carried out by many leaders that poses a number of challenges yet potential benefits (Kram, 1985). Moreover, organizations often view coaching as a key leadership task that can yield a number of benefits for the leader and the group which he or she leads (Heslin & Latham, 2004; Heslin, Vandewalle, & Latham, 2006). As such, I propose to add managing deep-level diversity and developing followers as dimensions of the leadership challenge demands construct. Below I further describe these two additional leadership challenge demands and argue that including them in my conceptualization and operationalization of

leadership challenge demands presents a more comprehensive perspective of the challenge demands—and specifically the relational challenge demands—that leaders face.

## Extending the Realm of Leadership Challenge Demands

**Managing deep-level diversity.** It is a fact of leadership that leaders must direct and coordinate the efforts of subordinates who have diverse personalities, values, and skills (Chen & Van Velsor, 1996; House & Adyita, 1997). This type of diversity is referred to as "deep-level diversity", or differences in psychological characteristics (Harrison, Price, & Bell, 1998). Unlike "surface level" characteristics (e.g., age, race, gender) which are overt and easily observable, deep-level traits are not as apparent on the surface. At the same time, groups and teams researchers have consistently found that deep-level characteristics are far more critical for team functioning and performance than surface-level traits (Bell, 2007; Hollenbeck, DeRue, & Guzzo, 2004; Stewart, 2006). Moreover, research shows that deep-level diversity becomes more critical for team functioning over time, whereas the importance of surface-level diversity tends to dwindle over time (Harrison et al., 1998; Harrison et al., 2002). Given these findings and the fact that leaders are ultimately responsible for the behaviors and performance generated by diverse groups, it seems critical to include *managing deep-level diversity* as an additional dimension of leadership challenge demands.

In terms of being a challenge demand, the foreseeable benefits of managing deep-level diversity are many. For example, one result of managing a group of subordinates diverse on deep-level traits may be higher performance (Barry & Stewart, 1997; Harrison et al., 1998, 2002). In addition, deep-level diversity can often create a greater sense of

cohesion and enable a group to be more innovative (Campion, Papper, & Medsker, 1996; Harrison et al., 1998). Each of these outcomes may bring a number of instrumental benefits to the leader such as increased visibility and recognition within the organization. In addition, as is the case for managing surface-level diversity, managing deep-level diversity allows leaders to gain new perspectives and insights about personal and workplace issues and to learn new methods of communicating and connecting with others.

Notwithstanding these potential benefits, there are several challenges and difficulties related to managing deep-level diversity. First, deep-level traits are not very malleable, meaning that subordinates' traits dispose them to act in certain ways that are often beyond the leader's control. This can be a frustrating experience for leaders who must often learn to communicate, motivate, and negotiate with different people in different ways (Rousseau, 2005). Secondly, deep-level diversity on certain traits can actually create serious problems for the leader. For example, a meta-analysis by Bell (2007) demonstrated that a single subordinate or team member low on agreeableness can significantly harm the entire team. There is likewise a strong negative correlation between diversity on conscientiousness and team performance (Bell, 2007). Finally, diversity in skills may require the leader to expend more effort in coaching subordinates.

Taken together, these arguments suggest that while managing deep-level diversity can bring a number of instrumental benefits to the leader, it also entails a high degree of challenge. In this sense, managing deep-level diversity fits well with the concept of leadership challenge demands. Unfortunately, the challenging job assignments model focuses only on managing surface-level diversity, while completely ignoring the

challenges, and yet the potential benefits, that come from managing deep-level diversity. I thus include managing deep-level diversity as an additional dimension of leadership challenge demands.

**Developing followers.** Scholars have long recognized that a critical task of leaders is to develop their followers, and organizations are increasingly expecting leaders to fulfill this task (Latham, Almost, Mann, & Moore, 2005; Ragins, Cotton, & Miller, 2000). There are at least two fundamental activities that leaders engage in to develop followers: coaching and mentoring (Hughes, Ginnett, & Curphy, 2006). First, coaching is defined as providing one-on-one feedback and insights to direct reports with the intent of guiding improvements in work performance (London, 2003; Yukl, 2009). Mentoring, on the other hand, is defined as providing a less-experienced junior employee with psychosocial and vocational support (Kram, 1985). Although many coaching or mentoring (i.e., developmental) relationships are created formally by an organization, many others evolve informally. However, no matter how developmental relationships between leaders and followers form, leaders in most organizations fulfill at least one or both of these development functions (Ragins et al., 2000). For example, in regards to coaching, many leaders must train employees on certain elements of their jobs, provide feedback on direct reports' performance, and help their direct reports set goals for performance improvement (Goldsmith, Lyons, & Freas, 2000). With regards to mentoring, types of psychosocial or vocational support rendered by leaders may include sponsoring a junior employees' career or giving advice and counsel on work-related and personal matters.

The coaching and mentoring provided by leaders has been shown to translate into a number of instrumental and psychological benefits for followers (Allen, Eby, Poteet, Lima, & Lentz, 2004). At the same time, Ragins and Scandura (1999) found that developing followers can likewise impart to the *leader* a number of instrumental and psychological benefits, such as a sense of fulfillment from seeing improvements in followers' performance and nurturing their personal and professional development; the chance to be able to "relive their lives" through followers; positive recognition and increased status in their organization; a wider and more loyal base of support; and improved job performance. Tepper and Taylor (2003) further showed that supervisors view developmental activities as extra-role behavior and, as such, expect the organization to reciprocate this behavior with favorable treatment.

Despite the fact that leaders often see a number of potential benefits stemming from developing followers, carrying out this task represents a particularly challenging aspect of a leader's job. For example, because of the informal nature of some developmental relationships, many of the development functions carried out by mentors fall outside the normal job requirements and therefore require a great deal of time and energy (Kram, 1985). Moreover, leaders often incur a degree of risk and vulnerability when developing followers given the amount of time involved in coaching followers and the emotional attachment that the leader invests in a mentoring relationship. If the developmental relationship goes sour or the direct report fails to live up to the leader's expectations, protégés may cast a negative shadow on the leader or violate a leader's trust (Eby, Durley, Evans, & Ragins, 2008; Heslin et al., 2006). Finally, in coaching and

mentoring followers, leaders face the unique challenge of striking a balance between being supportive while still providing constructive criticism (Eby et al., 2008).

Given the challenges and the potential benefits for leaders in developing followers, I argue that developing followers is a key leadership challenge demand in that it provides challenge while also having the potential to provide future benefits and opportunities for growth. Moreover, developing followers constitutes a demand that largely exists at the leader level and thus brings a broader perspective regarding the interpersonal demands that leaders face.

**Summary**

In sum, the following task, relational, and change-oriented demands compose the construct of leadership challenge demands: creating change, high levels of responsibility, managing boundaries, managing surface-level diversity, managing deep-level diversity, and developing followers. In accordance with DeRue and Wellman (2009), I expect these different challenge demands to load on a higher-order reflective construct representing the overall level of challenge demands that a given leader faces in his or her job. It should be noted that although the demands outlined above represent a fairly comprehensive set of leadership challenge demands, there could still be additional task, relational, or change-oriented demands besides just the ones enumerated above. However, the leadership challenge demands identified in this study represent a conglomeration of the most conceptually viable and empirically validated leadership challenge demands found in the literature to date. The concept of leadership challenge demands thus represents a more comprehensive and integrated perspective of the challenge demands that leaders face than is found in either the challenging job

assignments model or in current measures of challenge demands. Indeed, in order to adequately conceptualize leadership challenge demands, it required a review and integration of the challenging job assignments model with the challenge/hindrance demand framework, plus the addition of two other challenge demands specific to leaders—managing deep-level diversity and developing followers.

With the conceptualization of leadership challenge demands now complete, I now devote attention to the most critical issue of this research—namely, how leadership challenge demands can elicit "constructive" leadership behaviors like transformational leadership, or "destructive" leadership behaviors like abusive supervision and passive leadership, through the mechanisms of engagement and burnout. This process is the point of concern for the remainder of this chapter.

## Toward a Process Model

As noted in Chapter 1, the process by which leadership challenge demands are proposed to affect leadership behaviors—for "good" (i.e., transformational leadership) through heightened engagement, or for "bad" (i.e., abusive supervision, passive leadership) through increased burnout—is based on the transactional theory of stress (Lazarus & Folkman, 1984). The value of applying this theory to my research model is that it provides perhaps the best explanation of the processes underlying the relationship between job demands and work outcomes (Cooper et al., 2001; Griffin & Clarke, 2010). Moreover, it is the only theory which provides a sound theoretical foundation for understanding the effects of *challenge* demands specifically (LePine et al., 2005). However, despite being a well-cited theory, this is the only study to my knowledge which integrates transactional stress theory with theory and research on leadership behaviors. In

this sense, transactional stress theory not only serves as a useful underlying theoretical framework of my research model, but the integration of transactional stress theory with leadership behavior theory and research represents, in and of itself, a significant contribution because it allows us to better understand how leadership behavior is influenced by job demands.

That said, although transactional stress theory is extremely useful for explaining the *overall* process whereby leadership challenge demands affect leadership behaviors, one of its weaknesses is that it doesn't necessarily provide a lot of detail regarding the theoretical mechanisms underlying the relationships embedded within this overall process. For example, while transactional stress theory justifies exploring burnout and engagement as two affective-motivational reactions that are moderated by LSE, the theory does little to explain *why*, for instance, leadership challenge demands can lead to engagement or burnout, *why* LSE interacts with leadership challenge demands, or *why* engagement leads to transformational leadership and burnout to abusive supervision and passive leadership. I thus draw on engagement, burnout, and leadership theories in order to provide more sound explanations for why the relationships proposed in my theoretical model should hold.

My discussion begins with a review of the burnout and engagement constructs and a delineation of hypotheses regarding the direct effects of leadership challenge demands on these constructs. I then proceed with a discussion on the moderating role of LSE in these relationships. Together, these discussions will allow for an understanding of the process whereby leadership challenge demands come to impact leadership behavior. In a subsequent section, I will discuss the effects of burnout and engagement

on leadership behaviors, and then discuss the set of integrated models inherent in my research model.

**Direct Effects on Engagement and Burnout**

The transactional theory of stress posits that the stress process begins with individuals making certain appraisals of environmental demands. The first aspect of the demand appraisal process is the primary appraisal (Lazarus & Folkman, 1984). In the primary appraisal, individuals determine whether certain demands promote learning, growth, and future benefits, or, alternatively, whether they hinder and undermine one's goals. In essence, my literature review in the first section of this chapter provided evidence that people are fairly consistent in appraising certain demands as challenges and other demands as hindrances. Building off this evidence, in the second section of this chapter, I focused on leaders' primary appraisals of leadership demands and argued that leadership challenge demands are generally perceived as challenging in that they invite learning, personal growth, and future benefits for leaders.

Applications of the transactional stress model largely focus on how challenge demands directly influence affective-motivational responses to the demands (Crawford et al., 2010; LePine et al., 2005). Transactional stress theory then emphasizes that affective-motivational responses to demands provoke certain behavioral responses. In this vein, I propose that burnout and engagement represent two fundamental affective-motivational responses to challenge demands which then feed into one's leadership behaviors. Below I define burnout and engagement, discuss the basis for examining them as responses to leadership challenge demands, and develop two competing arguments about the relationships between leadership challenge demands and burnout and engagement.

**Burnout.** The concept of burnout was first introduced into the research literature by Maslach (1976) and refers to a psychological syndrome of work-related weariness characterized by emotional exhaustion and cynicism (Masclach & Jackson, 1981). Emotional exhaustion refers to feelings of emotional and physical resource depletion, overextension, and frustration. Cynicism—also labeled depersonalization—refers to an overall negative and callous feeling about people and one's work. For example, a person high on cynicism sees people more as objects rather than human beings. Maslach also includes professional efficacy—which refers to overall feelings of negativity about oneself in terms of one's competence and achievements—as another component to the construct of burnout. However, a growing trend is to assess exhaustion and cynicism together while excluding professional efficacy. Justification for this approach comes from meta-analytic evidence which suggests that professional efficacy has a surprisingly small relationship with the other two dimensions (Lee & Ashforth, 1996). Moreover, longitudinal research also suggests that exhaustion and cynicism develop entirely independent from professional efficacy (Golembiewski & Munzenrider, 1988). Thus, Maslach and Leiter (2008) agree that "exhaustion and cynicism are the two primary measures of burnout" and the "core" of the burnout construct (p. 501). In keeping with this perspective, plus the fact that my research model also includes LSE as a moderator of the challenge demands-burnout/engagement relationships, I exclude professional efficacy in my conceptualizion and operationalizion of burnout. This is done not only to reduce redundancy with the LSE scale used in this study, but also in accordance with the findings in the literature noted above.

Burnout has enjoyed a long history of research (Halbesleben & Buckley, 2004). Indeed, starting with the advent of the Maslach Burnout Inventory (MBI; Maslach & Jackson, 1981)—the predominant measure of burnout used in the literature—literally hundreds of studies in multiple disciplines have assessed both the antecedents and the outcomes of burnout. In reviewing the vast literature on burnout, Maslach et al. (2001) grouped the various contextual antecedents of burnout into three broad categories: job characteristics, occupational characteristics, and organizational characteristics. In terms of job characteristics, job demands are by far the most frequently examined. However, the majority of this research has focused on hindrance demands rather than challenge demands as predictors of burnout. For example, role conflict and role ambiguity consistently display a moderate to strong positive relationship with burnout. Crawford et al. (2010) also showed that challenge demands were related to burnout, though the effect of challenge demands on burnout was far weaker that of hindrance demands. In terms of occupational characteristics, a key finding in the literature on burnout is that occupations which require working intensively with other people are those that are most likely to induce burnout (Cordes & Dougherty, 1993). Finally, in terms of organizational characteristics, an organizational context that is characterized by job insecurity or injustice has been shown to increase burnout.

In addition to contextual factors, Maslach et al. (2001) reviewed various individual differences that have been found to influence burnout. For example, neuroticism has consistently been linked to higher levels of burnout because neurotics are naturally emotionally unstable and prone to experiencing psychological distress. Low levels of hardiness and an external locus of control are also related to burnout. Thus, in

addition to being influenced by various situational factors, burnout seems to have a dispositional component as well.

As far as outcomes of burnout, the research is clear that burnout is negatively related to organizational commitment and job satisfaction, and positively related to turnover intentions, absenteeism, lateness, and voluntary turnover (Lee & Ashforth, 1996). Not surprisingly, burnout is also related to lower task performance (e.g., Bakker, Demerouti, & Verbeke, 2004; Wright & Bonett, 1997) and organizational citizenship behavior (e.g., Cropanzano, Rupp, & Byrne, 2003). Finally, burnout has been shown to predict higher levels of workplace deviance (e.g., Mulki, Jaramillo, & Locander, 2006; van Jaarsveld, Walker, & Skarlicki, 2010).

**Engagement.** Engagement was first introduced by Kahn (1990), who defined it as the harnessing of one's full self in role performance and a full psychological presence at work (Kahn, 1992). Building in large part on Kahn's work, Schaufeli and his colleagues (2002) later defined and operationalized engagement more specifically as a persistent and positive work-related affective-motivational state that is characterized by vigor, dedication, and absorption. *Vigor* refers to feelings of high energy and resilience at work. Individuals high on vigor can work for long periods of time and feel energetic about going to work each day. *Dedication* is characterized by a sense of pride and enthusiasm that a person feels toward his or her work. Dedication represents something beyond identification with one's work by "not only referring to a particular cognitive belief state but including the affective dimension as well" (Schaufeli et al., 2002, p. 75). Finally, *absorption* refers to fully concentrating and being deeply engrossed in one's work. Absorption in one's work is related to the concept of "flow", or a state of focused

attention and clear mindedness (Csikszentmihalyi, 1990). However, "flow is a more complex concept that includes many aspects and refers to rather particular, short-term 'peak' experiences instead of a more pervasive and persistent state of mind, as is the case with engagement" (Schaufeli et al., 2002, p. 75). Together, these three elements of engagement—vigor, dedication, absorption—represent a positive, persistent, task-directed affective-motivational state which entails full presence at work and subsequently leads to certain work behaviors (a brief review on the outcomes of engagement will be given shortly). The three dimensions of engagement have generally been found to load on a single higher-order factor representing one's overall work engagement (e.g., Sonnentag, 2003).

It should be noted that while theory and research on the concept of engagement can be traced in large part to Kahn's (1990, 1992) work on the subject, various other operationalizations of the construct have appeared in the literature. For example, Rothbard (2001) viewed engagement as consisting of two dimensions: attention (level of focus and concentration) and absorption (intensity of focus and concentration). She found, however, that there were few functional differences between these highly-correlated dimensions. Indeed, both attention and absorption are captured in the *absorption* dimension of Schaufeli et al.'s (2002) model. Rich, LePine and Crawford (2010) took a different approach and framed engagement as being composed of three different dimensions: cognitive, emotional, and physical investment at work. There are likewise a few similarities between the Rich et al. and the Schaufeli et al. models of engagement. For instance, cognitive engagement is related to absorption, although the absorption items in the Schaufeli et al. scale are more affective in nature (e.g., "I feel

happy when I am working intensely") than the cognitive engagement items in the Rich et al. measure (e.g., "At work, I concentrate on my job"). Elements of Rich et al.'s emotional engagement scale are likewise included in both the vigor and the dedication dimensions of Schaufeli et al.'s scale. The key difference between these two measures is that the Rich et al. scale includes a physical engagement dimension, which reflects what Macey and Schneider (2008) call *behavioral engagement* (see also Shirom, 2003), or the display of behaviors that result from *feeling* engaged (e.g., "I strive as hard as I can to complete my job", "I try my hardest to perform well on my job"). However, Kahn (1992) noted that psychological presence is more of an affective-motivational state that is not to be confused with the behavior that results from it. Though this difference may seem subtle, it is a critical distinction in my research in that the transactional theory of stress is about job demands triggering affective-motivational states, which then translate into certain coping behaviors (in this case, leadership behavior). Given the points made above, I argue that the Schaufeli et al. conceptualization and operationalization is more reflective of engagement as an affective-motivational state than those of Rothbard or Rich et al. Moreover, it is by far the most frequently used measure of engagement in the research literature. Thus, in keeping with the transactional stress perspective, which argues that demands first influence affective-motivational states, I have chosen to adopt the Schaufeli et al. conceptualization and measure of engagement.

Unlike burnout, which has been a subject of research for over 30 years, research on engagement is still in its infancy (Macey & Schneider, 2008). Much of the empirical development of the engagement construct has been done by Schaufeli and his colleagues. Interestingly, Schaufeli et al. (2002) began investigating engagement not only out of

interest in Kahn's (1990) concept of engagement, but also because he was interested in identifying positive antipodes of burnout (the distinctiveness of engagement and burnout is discussed more below). This development reflects a current trend of focusing on "positive psychology" constructs. Despite being in its infancy, however, engagement has been linked to critical individual and organizational outcomes. In terms of outcomes, engagement has been shown to predict performance outcomes such as task performance and organizational citizenship behavior (Rich et al., 2010; Saks, 2006), and attitudinal outcomes such as job satisfaction, organizational commitment, and turnover intention (Saks, 2006; Schaufeli & Bakker, 2004). Engagement has also been linked to health outcomes (e.g., Demerouti et al., 2001; Schaufeli & Bakker, 2004) and absenteeism (e.g., Bakker, Demerouti, De Boer, & Schaufeli, 2003; Schaufeli et al., 2009). Harter, Schmidt, and Hayes (2002) further found that employee engagement was a significant predictor of business-level financial outcomes. In terms of antecedents, a variety of contextual variables have been shown to influence engagement, including value congruence, perceived organizational support, and procedural justice (Rich et al., 2010; Saks, 2006). However, the most frequently researched antecedents to engagement are job demands and job resources (e.g., social support) because these are the core outcomes in the job demands-resource model of engagement and burnout (Schaufeli & Bakker, 2004). As noted earlier, the typical assumption in the job demands-resource model is that job demands lead to higher burnout and lower engagement. However, Crawford et al. (2010) meta-analytically demonstrated that while hindrance demands followed this pattern of relationships, challenge demands exhibited positive effects on engagement andburnout.

**Distinctiveness of burnout and engagement.** One question that naturally comes up when discussing engagement and burnout is whether they are in fact distinct constructs. Early empirical research on engagement focused considerably on discriminant validity issues of burnout and engagement, and there was much debate in this regard. On one hand, Maslach and colleagues (Maslach & Leiter, 1997; Maslach et al., 2001; Maslach & Leiter, 2008) repeatedly argued that engagement is the polar opposite of burnout and that is best assessed by inversing the pattern of scores on the MBI dimensions. In other words, they argue that the MBI reflects a single engagement-burnout continuum such that a low level of burnout means the person is highly engaged. On the other hand, Schaufeli and colleagues (2002) take a different approach to conceptualizing engagement. In their view, while engagement could be considered a "positive" opposite of burnout, engagement is not the opposite in terms of it being on the other end of the burnout continuum. Rather, engagement and burnout operate like positive and negative affect (Russell & Caroll, 1999); that is, rather than being two opposite poles of the same continuum, engagement and burnout are independent, though negatively correlated, states of employee affect and motivation. Thus, Schaufeli and colleagues argue that engagement should be considered a separate construct and measured in its own right rather than by inversing scores on the MBI.

Recent primary studies and meta-analytic evidence have provided more support for Schaufeli and colleagues (2002) perspective of burnout and engagement than that of Maslach and colleagues (2001). For instance, Crawford et al.'s (2010) meta-analysis found that challenge demands were positively related to both burnout and engagement whereas hindrance demands were negatively related to engagement and positively related

to burnout, thereby showing that the nomological networks of engagement and burnout differ. Moreover, the corrected correlation between burnout and engagement ($\rho$ = -.48) was not high enough to suggest that they are polar opposites of the same continuum. This led Crawford et al. to argue that "the two constructs are not empirical opposites, and that additional variance in relationships with antecedents can be explained by maintaining their distinctiveness" (p. 844). Moreover, they suggested that future primary research is needed that examines relationships between job demands and "organizationally valued criteria through both burnout and engagement as *dual mediators*" (p. 845, emphasis added). For this and other reasons mentioned below, I have chosen to focus on engagement as a positive-valenced affective-motivational response to leadership challenge demands, and burnout as a negatively-valenced affective-motivational response to leadership challenge demands.

**Basis for including burnout and engagement.** There are four main reasons why burnout and engagement are examined in my model as responses to leadership challenge demands. First, burnout is a central variable in the transactional model of stress. Indeed, some have defined the burnout construct entirely in the context of transactional stress theory (Cooper et al., 2001), noting that burnout "refers to an extreme state of psychological strain and depletion of energy resources arising from prolonged exposure to stressors that exceed the person's resources to cope" (p. 84). In this sense, including burnout as a response to leadership challenge demands achieves a nice fit with the transactional model of stress, which serves as a foundation for my theory regarding the process by which leadership challenge demands impact leadership behavior. Though transactional stress theory focuses more on burnout than engagement, transactional stress

theorists also make allusions to engagement as occurring when people perceive their capabilities as being sufficient to meet challenges. For example Lazarus (1995) states that challenge "allows us to feel enthused, engaged and expansive" (p. 6) and that when this challenge is met with perceptions that one has the capability to handle the demand, then people "feel expansive—even joyous—about the struggle that will ensue" (Lazarus, 1999, p. 76). In sum, the centrality of burnout to transactional stress theory, coupled with the notion that burnout and engagement should be examined as dual mediators of job demands and valued organizational criteria such as leadership behavior (Crawford et al., 2010), provides at least one justification for including engagement and burnout in my model.

Second, burnout and engagement serve as broad constructs that capture several narrow affective reactions individuals may have to leadership challenge demands. At the same time, burnout and engagement have more elevated affective tones than emotions such as attentiveness or anxiety (Macey & Schneider, 2008), and they tend to be more enduring states than these and other emotions such as frustration or joy (Weiss & Cropanzano, 1996). In addition, engagement and burnout are work-specific affective states with a motivational component, whereas constructs such as positive or negative affect are not (Macey & Schneider, 2008). In sum, burnout and engagement construct are more likely to capture the array of different affective and motivational reactions that leaders experience in response to leadership challenge demands, and thus explain more variance than would be explained by narrow or non-work-oriented affective states.

Third, examining burnout and engagement as a result of leadership challenge demands builds on the findings by Crawford et al. (2010) noted earlier. Uncovering the

complexity of challenge demands by investigating factors that determine whether a person will react to challenge demands with more engagement or burnout represents a theoretical and empirical contribution that builds on Crawford et al.'s noteworthy findings.

Finally, a major assumption in burnout theory is that burnout is a phenomenon found primarily among workers in people-oriented roles. Although the research on burnout has primarily been focused on its emergence among caregiving and human service professions (e.g., nurses, social workers, teachers), a number of scholars suggest that managers are particularly susceptible to burnout given the frequent interpersonal contact and multifaceted demands involved with leadership (Cordes & Dougherty, 1993). Pretty et al. (1992) showed that burnout is more prevalent among managers than non-managers. In this sense, burnout appears to be a negative affective-motivational reaction to challenge demands that is particularly applicable to leaders. Again, given Crawford et al.'s (2010) suggestion, it then makes sense to investigate engagement along with burnout as a dual mediator of leadership challenge demands and leadership behaviors.

**Hypothesized relationships.** Two competing arguments can be made to address how leadership challenge demands affect engagement and burnout (Lazarus, 1995). First, in terms of leadership challenge demands leading to engagement, Kahn's (1990, 1992) proposed three specific work characteristics that facilitate the conditions under which individuals can experience engagement: challenging tasks that promote growth and learning, roles that carry status and influence, and interpersonal interactions. Each of these work characteristics are embedded in the leadership demands construct. For example, as discussed extensively in the previous section, each of the dimensions of the

leadership challenge demands construct involves challenging tasks that promote growth and learning. However, leadership roles also carry influence and status, particularly for those which entail a high level of responsibility. In addition, virtually all leadership challenge demands involve interpersonal interactions, although they are especially apparent in the managing diversity (both surface- and deep-level) and developing followers dimensions of the model. Leaders who face challenge demands are thus predicted to become more engaged in response to the demands.

The principal reason why leadership challenge demands should impact engagement, according to Kahn (1990), is because challenge allows leaders to experience psychological meaningfulness. Meaningfulness is defined by Kahn as feeling valuable, worthwhile, and useful in an organization, and it is viewed as a return on the investment of one's full psychological presence at work. Pratt and Ashforth (2003) similarly describe meaningfulness as arising when work is "perceived by its practitioners to be, at minimum, purposeful and significant" (pp. 310-311). Leadership challenge demands should evoke such feelings of significance, worth, and usefulness at work. For example, leaders charged with creating change, managing multiple functions, or serving as a formal mentor to a junior employee are likely to feel a sense of significance and to feel useful because they feel valued and trust by the organization, and they feel that they are "making a difference." Such feelings then allow leaders to feel a greater sense of energy, dedication, and absorption in their role. In sum, as noted by a participant in Kahn's (1990) qualitative study on engagement, challenge demands are what "gets [people] excited about coming into the office" (p. 704) because challenge evokes meaningfulness in one's work.

Other perspectives related to engagement suggest a number of other mechanisms besides psychological meaningfulness by which challenge demands should impact engagement. For example, Locke and Latham (2002) argued that challenging tasks and goals play directive and energizing functions such that people are more likely to be focused, absorbed, and vigorous at work when faced with challenging tasks. Moreover, challenging tasks increase people's persistence and dedication at work because employees are more likely to trust that their investment of time and energy will pay off in terms of increased recognition and rewards (Britt, Adler, & Bartone, 2001). For example, because mentoring followers has been shown to produce instrumental benefits for the mentor, leaders may persist in filling mentoring functions despite the difficulty and challenge in doing so because they foresee themselves as being recipients of the benefits of mentoring. Moreover, leaders with either a high level of responsibility or who have been charged with creating change will feel that through hard work and perseverance, their efforts will be paid off in terms of increased rewards and recognition within the organization. Thus, leadership challenge demands should lead to greater focus at work (absorption), higher levels of energy (vigor) and a strong commitment to persist in meeting the demands (dedication).

That said, theories on burnout suggest that leadership challenge demands may have a far different effect on leaders—namely, that leadership challenge demands will result in burnout. This perspective is largely taken from the conservation of resources theory (Hobfoll, 1989), which is considered by many to be the most useful theory for understanding the processes leading to burnout (Halbesleben, 2006; Halbesleben & Buckley, 2004; Shirom, 2003). The theory proposes that job demands (whether

challenge or hindrance) lead to burnout through an energy depletion process because they require sustained mental, physical, and emotional effort. This sustained effort depletes a person's energy resources and comes with certain psychological costs (Schaufeli et al., 2002). In particular, the depletion of one's energy and the constant need to meet demands can leave people feeling emotionally drained and worn out. Feelings of frustration and anxiety frequently emerge when one is persistently faced with challenge demands because meeting the demands is taxing and difficult.

Leadership challenge demands may be particularly apt to induce feelings of burnout. Specifically, although leadership challenge demands are perceived as being learning experiences and having the potential to bring about future benefits, they do nonetheless require the exertion of substantial amounts of personal energy. For example, it requires large amounts of energy to manage relationships with third parties of the organization (managing boundaries) while at the same time providing adequate amounts of mentoring to subordinates. Similarly, it requires a high level of energy to make a sweeping strategic change in one's group or organization while simultaneously dealing with differences of opinion that arise when one manages a demographically and psychologically diverse group of direct reports. In addition, Maslach (1978) proposes that the professions where burnout is most likely to occur are those that involve significant interpersonal contact. Jobs that involve dealing with people on a consistent basis entail a high level of arousal and energy exertion, particularly when the interaction involves solving difficult problems or dealing with difficult people, as is often the case when it comes to managing diversity and external boundaries (Maslach et al., 2001). Finally, leaders with a high level of responsibility face an intense amount of pressure

because their success or failure is very evident to parties inside and outside the organization, yet at least some of their success is dependent on factors outside their immediate control. The pressure, uncertainty, and risk that come with high levels of responsibility can take a toll on a person's emotional energy resources. In sum, conservation of resources theory would predict that the constant exertion of energy to meet multifaceted leadership challenge demands can leave leaders feeling worn out, used up, and otherwise physically and emotionally drained.

Finally, it should be noted that the multidimensional nature of leadership challenge demands means that leaders who face a high level of challenge demands may be more susceptible to role overload (Day, Sin, & Chen, 2004), which is the perception that one has taken on an excessive amount of work, responsibilities, and commitments (Beehr & Glazer, 2005). Role overload has been shown to lead to increased burnout (Gilboa, Shirom, Fried, & Cooper, 2008).

Taken together, engagement and conservation of resources theories predict a competing set of relationships between leadership challenge demands and engagement and burnout. Whereas engagement theory views leadership challenge demands as being positively related to engagement, conservation of resources theory predicts that leadership challenge demands will be positively related to burnout. More specifically, engagement theory posits that leadership challenge demands trigger higher engagement because they allow leaders to experience more meaning in their work, focus on relevant tasks, and to persist in meeting the challenge demands. However, conservation of resources theory suggests that because leadership challenge demands require a great deal of energy exertion through intense interpersonal interaction, a large amount of visibility

and pressure, and the juggling of multiple roles, and therefore have the potential to deplete leader's energy and leave them feeling burned out. Thus, consistent with this reasoning and Crawford et al.'s (2010) meta-analytic findings supporting both engagement and conservation of resources theories, I propose the following hypotheses:

*Hypothesis 1a: Leadership challenge demands are positively associated with engagement.*

*Hypothesis 1b: Leadership challenge demands are positively associated with burnout.*

**Moderating Effect of Leadership Self-Efficacy**

As noted earlier, the nuanced system of relationships proposed in Hypotheses 1a and 1b points to the fact that leaders can experience engagement or burnout in response to leadership challenge demands (keeping in mind, of course, that engagement and burnout represent distinct constructs). To explain this pattern of relationships, scholars are increasingly recognizing that individuals can differ quite drastically in their reactions to challenge demands in that some individuals are more prone to experience positive emotions and high energy, whereas others are more apt to experience negative emotions and energy depletion, in response to challenge demands. This points to the need of identifying what it is that causes leaders to become either engaged or burned out as a result of leadership challenge demands. One potential explanation was recently offered by Rodell and Judge (2009). Specifically, Rodell and Judge drew on affective events theory (Weiss & Cropanzano, 1996) to propose that whereas individuals high in extraversion are more likely to respond to challenge demands with the emotion of attentiveness, individuals low in extraversion would respond to challenge demands with

more anxiety. In turn, anxiety was predicted to lead to counterproductive work behaviors, while attentiveness was predicted to lead to citizenship behaviors. Although their data supported the notion that some individuals react to challenge demands with attentiveness and citizenship behavior while others react with anxiety and counterproductive behaviors, Rodell and Judge unfortunately failed to detect an interaction between extraversion and challenge demands. However, I argue that an answer to what determines whether leaders feel more engaged or burned out in response to leadership challenge demands may be found in transactional stress theory's notion of the secondary demand appraisal rather than in the realm of personality.

Transactional stress theory emphasizes that following the primary appraisal of environmental demands (i.e., judgment of whether demands are challenge vs. hindrance), individuals make a so-called secondary appraisal of the demands. The secondary appraisal process plays a critical role in the stress coping process because in it an individual determines his or her ability and resources to effectively cope with the challenge (Lazarus & Folkman, 1991). The theory then argues that the interaction between the primary and secondary appraisal processes elicit certain affective-motivational responses. For example, when individuals are confronted with a challenge demand and they perceive themselves as having the resources necessary to cope with and control the demand, then the result is that they "feel expansive—even joyous—about the struggle that will ensue" (Lazarus, 1999, p. 76); that is, they feel engaged in their work Conversely, when individuals perceive that a demand is indeed challenging but that they lack adequate resources to meet the demand, then the result is feelings of exhaustion and negative thoughts about one's role (Smith & Lazarus, 1990); that is, they feel burned out.

Despite the criticality of the secondary appraisal process, a typical discussion about challenge demands includes only a prediction of their direct effects on work attitudes and outcomes without considering how challenge demands interact with people's perceptions regarding their ability to cope with the challenge demands. Indeed, in published studies on the challenge/hindrance demand framework in the management literature, the secondary appraisal process has altogether been ignored. For example, LePine et al. (2005), in speaking of the effects of challenge demands, stated that "the outcome of this initial [primary] appraisal influences emotions, which in turn influence how a person copes with stressors" (p. 765). However, this statement is not completely accurate because transactional stress theory emphasizes that it is the *interaction* between challenge demands and a person's perceived resources to cope with the demands which becomes the critical driver of affective-motivational reactions and coping behavior (Lazarus, 1999). Indeed, "these two appraisals are the key to the stress-coping process" (Cooper et al., 2001, p. 12). In this sense, the reason for the competing effects of challenge demands on engagement and burnout could be due, at least in part, to the nature of individuals' secondary appraisals of challenge demands. Until now, however, this notion has not been considered.

Of course, the notion that perceived coping resources play a critical role in the way individuals cope with job demands is not unique to just transactional stress theory. For example, frameworks like the conservation of resources theory (Hobfoll, 1989) give ample consideration to the idea that resources like social support determine how people react to job demands (Halbesleben, 2006; Schaufeli et al., 2009). Karasek (1979) argued that decision latitude and autonomy likewise serve as resources that buffer the effects of

demands on strain. Feedback is yet another resource that is proposed to mitigate the effects of job demands on burnout (Kluger & Denisi, 1986). Indeed, the range of resources which a person can draw on to combat strain in the face of high demands is seemingly endless. However, Lazarus (1999) noted that perhaps the most critical question people ask themselves in the secondary appraisal process is whether they feel personally capable of doing anything about the demands they face. Building on this point, Perrewé and Zellars (1999) argued that self-efficacy is the ultimate driver of coping behavior and the key element of the secondary appraisal.

Self-efficacy is defined as the belief in one's capability to perform successfully in a specific task domain (Bandura, 1986). The benefits of self-efficacy for work performance have been repeatedly demonstrated by meta-analytic reviews (Bandura & Locke, 2003; Sadri & Robertson, 1993; Stajcovich & Luthans, 1998). However, as noted above, scholars have argued that self-efficacy also plays perhaps the most pivotal role in individuals' reactions to job demands. For example, Bandura (1997) stressed the centrality of self-efficacy in the demand appraisal process when he argued that "social cognitive theory views stress reactions primarily in terms of a low sense of efficacy to exercise control over aversive threats and taxing environmental demands" (p. 262). He went on to further point out that "stress reactions are governed largely by beliefs of coping efficacy" (p. 262).

The reason for the centrality of self-efficacy in the secondary demand appraisal process is that other key resources like social support, feedback, or job autonomy ultimately contribute to the development of one's self-efficacy (Bandura & Cervone, 1983; Kluger & Denisi, 1986; Paglis & Green, 2002; Paglis, 2010; Wenzel, 1993).

Indeed, Bandura (1997) reviewed evidence from a large number of studies showing that self-efficacy fully mediates the relationships between social support and feedback and various learning and performance outcomes. In fact, social support and feedback are considered by Bandura (1986) to essentially be forms of "verbal persuasion", which Bandura argues is one of the core sources of self-efficacy perceptions. In this regard, feedback intervention theory (Kluger & Denisi, 1986) suggests that feedback is a form of social support that enhances perceptions of self-efficacy. In a similar fashion, Fletcher (1991) found that having a high level of autonomy at work is considered by some to be an indicator of social support and therefore also serves as a facilitator of self-efficacy. Specific to LSE, Paglis and Green (2002) found that both social support and job autonomy serve as significant antecedents of LSE. Ng et al. (2008) also found job autonomy to be a significant correlate of LSE. Taken together, this evidence suggests that self-efficacy acts as a more proximal variable in the secondary appraisal process compared to social resources like support, feedback, or job autonomy in that these other resources ultimately feed into one's self-efficacy (Gist & Mitchell, 1992; Kanfer, 1991).

The same argument for self-efficacy being more proximal than social resources can also be made in relation to personality. Judge and Ilies (2002) found that neuroticism, extraversion, and conscientiousness were each moderately related to task-specific self-efficacy. Building on this finding, Ng et al. (2008) found that LSE acts as a proximal mediator between distal Big Five personality traits and follower perceptions of leader effectiveness. Again, these findings provide support for the proximal role of self-efficacy in affecting the appraisal process. That personality is more distal than self-efficacy could be the reason why Rodell and Judge (2009) failed to detect any moderating effects of

extraversion or neuroticism in the relationships between challenge stressors and the emotional states of attentiveness and anxiety. In fact, many work stress scholars have indicated the need for examining more proximal moderators of job demands (Cooper et al., 2001).

In this regard, a few studies have examined self-efficacy as a moderator of job demands-strain relationship (e.g., Jex & Bliese, 1999; Jex, Bliese, Buzzell, & Primeau, 2001; Schaubroeck & Merritt, 1997). However, moderating effects have been inconsistently found in these studies. One reason for this equivocal pattern of relationships could be a lack of matching the task domain of the self-efficacy measure with the demands being measured (Cooper et al., 2001). Scholars have found support for the need to achieve a match between the type of stress buffer being examined and the specific demands under question (Sargent & Terry, 1998). In this sense, LSE and leadership challenges provide a nice theoretical "match" of constructs.

An important point to make, however, is that while various theoretical frameworks propose that low self-efficacy will *exacerbate* the effects of job demands on burnout, there is also evidence to suggest that high self-efficacy can *enable* a high level engagement when one is faced with challenge demands. Given the uniqueness of the burnout and engagement constructs, this distinction seems to be a critical one to make. For example, Rodell and Judge (2009) took a similar perspective when they proposed that high extraversion would enable higher attentiveness in the face of challenge demands, whereas low extraversion would exacerbate feelings of anxiety (where attentiveness and anxiety, like burnout and engagement, are related yet distinct constructs). Although Rodell and Judge did not detect these proposed interactions, I suggest, as noted earlier,

that there is a greater probability of detecting a similar pattern of interactions when LSE is examined as a moderator of leadership challenge demands, given the centrality of self-efficacy in the transactional stress model and the fact that these two constructs "match" each other more precisely.

With this in mind, below I define LSE and offer a brief literature review on the topic. I will then develop hypotheses wherein I predict that low-LSE leaders who face high leadership challenge demands will experience more burnout than leaders high in LSE, whereas high-LSE leaders who face high leadership challenge demands will feel more engaged than those low in LSE.

**Leadership self-efficacy.** Based on the notion of self-efficacy being task-specific, LSE is defined as a leader's perceived ability to effectively perform functions that comprise leadership roles (Anderson, Krajewski, Goffin, & Jackson, 2008; Chemers, Watson, & May, 2000; Kane, Zaccaro, Tremble, & Masuda, 2002; Murphy &Ensher, 1999; Ng et al., 2008; Paglis, 2010). The measurement of the LSE construct has differed somewhat in the literature, with some studies asking participants about their leadership capabilities in very general terms (e.g., "I am confident of my ability to influence the group I lead"; Murphy & Ensher, 1999). However, consistent with the notion that leadership roles and functions can be categorized into task, relational, and change-oriented roles, most LSE researchers have employed measurement scales which tap leaders' confidence in carrying out these various roles. For example, using a group of military cadets, Chemers et al. (2000) developed a scale that gauged leaders' confidence in carrying out leadership functions such as initiating change, planning and organizing, delegation, and influencing followers. Ng et al. (2008) adapted the Chemers et al. (2000)

to a corporate context and found, as noted earlier, that LSE acts as a mediator between Big Five personality traits and leader effectiveness. Paglis and Green (2002) focused solely on LSE as it relates to leading change efforts in organizations. In either case, leadership efficacy is seen as reflecting more than just an assessment of one's general capabilities as a leader. Rather, leadership efficacy reflects a leader's confidence in carrying out certain functions associated with the task, relational, and change-oriented roles of leadership.

Though self-efficacy has been a subject of research for well over three decades, LSE is a relative newcomer to the field of leadership. The concept was first introduced by Chemers et al. (2000), who found that leaders high on LSE received stronger leadership effectiveness ratings. Anderson et al. (2008) likewise found that LSE was positively related to perceptions of leader effectiveness. Paglis and Green (2002) found that a leader's efficacy for executing change was related to the frequency with which leaders pushed for change and continuous improvement. Semadar, Robins, and Ferris (2006) found that LSE was significantly correlated with managers' annual performance appraisal scores. As noted earlier, Ng et al. (2008) showed that LSE mediated the relationship between various Big Five traits (extraversion, neuroticism, conscientiousness) and perceptions of leader effectiveness. Finally, Hoyt, Halverson, Murphy, and Watson (2003) demonstrated that LSE was related to higher collective efficacy in the groups for whom leaders were accountable.

As can be deduced from the literature review above, the research on LSE is still quite limited and has focused for the most part on linking LSE with leader effectiveness or group motivation. The present study thus represents the first attempt to examine LSE

as it impacts leaders' engagement, burnout, and leadership behaviors. LSE is proposed to impact engagement and burnout—and eventually leadership behaviors—through its interaction with leadership challenge demands.

**Hypothesized relationships.** Just as conservation of resources theory is valuable for explaining how leadership challenge demands may result in burnout, it is also valuable for understanding why this relationship should be stronger for low-LSE leaders. First, conservation of resources theory is based on the notion that burnout emerges when demands exceed the amount of available personal resources to cope with the demands (Cooper et al., 2001). Hobfoll (1989) proposed that individuals have access to four main categories of resources: objects (e.g., car, house), conditions (e.g., job security, social support), personal characteristics, and energy. Though most applications of Hobfoll's model focus on social support as a resource people use to cope with demands, within the conservation of resources model, self-efficacy is argued to be a critical and robust personal characteristic that serves as a resource which individuals can tap into when confronted with a high level of demands (Hobfoll & Lieberman, 1987). As noted earlier, conservation of resources theory proposes that job demands require individuals to exert a high amount of personal energy resources. Resources—particularly personal resources like self-efficacy—essentially help conserve personal energies over time. However, if one lacks adequate self-efficacy to persist in the face of demands, then there is little with which to replenish one's energy, thereby causing the demands to produce a downward spiral that results in one's energy resources becoming depleted (Bandura, 1986; Hobfoll, 1989).

Low self-efficacy exacerbates the energy depletion process resulting from challenge demands for at least two reasons. First, Brockner (1988) argued that individuals with low self-efficacy experience more negative emotions when faced with external events that require the expenditure of high levels of effort because low-efficacy individuals believe that, in the end, they will be unable to meet the challenge demands. The result is feelings of increased uncertainty and unpredictability in one's work, which, in turn, induces feelings of frustration and anxiety (Bandura, 1986). Feelings of frustration can rapidly deplete a person's energy in unproductive ways, thereby leading to feelings of burnout. Relatedly, individuals low on self-efficacy tend to be more self-critical about the correctness of their actions, thoughts, and emotions. This means that individuals who face a set of challenging demands are more likely to dwell on their personal deficiencies than on the task at hand (Bandura, 1997). Dwelling incessantly on personal deficiencies inhibits persistence and tenacity in meeting the challenges with which one is confronted (Bandura, 1986). Giving inordinate amounts of attention to personal deficiencies likewise results in feelings of anxiety and unsettlement. Again, feelings of increased anxiety and uncertainty result in a depletion of one's energy resources.

Applying the conservation of resources perspective to the present study, LSE is proposed to serve as a critical resource that leaders use to replenish the energy sources that are naturally depleted because of the high levels of effort required to meet leadership challenge demands. However, as suggested by Brockner (1988), leaders who lack LSE will emotionally react more adversely to leadership challenge demands because they will doubt their ability to effectively cope with and meet the challenge demands with which

they are confronted. Moreover, low-LSE leaders who face a high level of leadership challenge demands will be more likely to focus their thoughts on their personal deficiencies rather than on ways to meet the challenge demands their leadership role entails, thereby depleting them of personal energies due to increased levels of anxiety and frustration. Thus, with a deficiency of self-assurance to adequately meet leadership challenge demands, the leader simply cannot conserve or replenish the energies that are being expended. As a result, rather than being buffered against burnout, leaders' personal energy resources eventually become depleted. This sense of energy depletion is the core of the burnout construct (Maslach & Leiter, 2008), and it can inhibit the leader's ability to further cope with the challenges he or she faces (Schaubroeck & Ganster, 1993).

As an example of this process, consider a leader who is asked to manage the execution of a new product line (i.e., creating change). The leader will most likely perceive that by launching the new product line successfully, he or she has the potential to garner recognition and rewards from parties both inside and outside the organization since change efforts are some of the most recognizable and impactful things that managers carry out (Bass, 1985). However, if the leader lacks the confidence to carry out various leadership functions necessary for coordinating the change—such as setting a clear direction, coordinating tasks, delegating effectively, or motivating followers—then the leader will tend to be more self-critical, particularly when he or she makes mistakes or when there are high-stakes decisions to be made. Moreover, the leader may see the task of launching the new product line as too overwhelming given his or her perceived lack of ability to successfully manage the execution of the new product line. Feelings of anxiety, frustration, and uncertainty then settle in because the leader essentially predicts

that he or she will fail in launching the new product. As a result, the leader's emotional resources are depleted, thereby causing the leader to experience heightened feelings of burnout. Thus, I propose the following hypothesis:

*Hypothesis 2a: LSE will moderate the positive relationship between leadership challenge demands and burnout such that the relationship will be stronger when LSE is low.*

As noted earlier, conservation of resources theory primarily considers self-efficacy as exacerbating burnout (low self-efficacy) or, at best, buffering demand-burnout relationships (high self-efficacy). This perspective, however, ignores the possibility that challenge demands can actually create what Selye (1976) described as a sense of euphoria or elation, or what Lazarus termed expansive and joyous feelings (Lazarus, 1999). In this vein, engagement theorists suggest that individuals who believe they have the capabilities to meet the demands they face are more prone to experience a heightened sense of engagement in response to the demands (Kahn, 1990). This study represents the first attempt to test how high self-efficacy can strengthen the relationship between challenge demands and engagement.

The notion of LSE enabling engagement in the face of high leadership challenge demands can be traced back to Kahn's original engagement theory. Specifically, Kahn (1990, 1992) found in his qualitative research that camp directors and project managers had to make themselves "psychologically available" in order to experience engagement. According to Kahn, being psychologically available was largely "a matter of security in abilities and status and maintaining a focus on tasks rather than anxieties" (1990, p. 716). Thus, from Kahn's perspective, self-efficacy plays a critical role in facilitating

engagement. Given that Kahn also found challenging tasks, high-status roles, and interpersonal interactions to stimulate engagement through heightened meaningfulness, we would expect that leadership challenge demands and LSE would jointly produce heightened feelings of engagement through higher meaningfulness. For example, Pratt and Ashforth (2003) suggested that individuals experience meaningfulness when they see an alignment between their work roles (i.e., what they do) and their personal identities (i.e., who they are). High-LSE leaders undoubtedly perceive their leadership roles as being an integral part of their identity (Bandura, 1986). When the significance of one's leadership role is enhanced by high leadership challenge demands, high-LSE leaders are likely to find even greater meaning in their work because the high demands allow them to feel more authentic at work and express themselves through their leadership role. This higher perceived meaningfulness then leads to greater energy, focus, and dedication at work (Kahn, 1990). Taken together, these arguments suggest that challenging tasks and high self-efficacy go hand-in-hand in stimulating engagement. Thus, LSE enhances the feelings of meaningfulness that come from facing leadership challenge demands, and should thereby strengthen the relationship between leadership challenge demands and engagement.

Another reason why high LSE should strengthen the relationship between leadership challenge demands and engagement is suggested by Locke and Latham (2002). They argue that self-efficacy enhances people's commitment to challenging goals and tasks. Enhanced commitment leads to higher levels of energy and vigor presumably because a person who is committed to meeting challenge demands will remain more mentally and emotionally resilient. Moreover, greater commitment means that a person

will be more dedicated and absorbed in his or her work because commitment drives people's attention toward task-relevant activities. Thus, LSE should strengthen the relationship between leadership challenge demands and engagement because a leader who perceives him/herself as capable of carrying out leadership functions should be more committed to confronting and meeting the leadership challenge demands, and this commitment, in turn, should allow the leader to feel more vigor and focus at work.

A final reason why high LSE should heighten the effects of leadership challenge demands on engagement is that leaders high on LSE will view leadership challenge demands as opportunities to demonstrate their competence. For example, Bandura (1997) noted individuals high in self-efficacy who face little challenge in their work feel underused, overqualified, and thus tend to just "go through the motions" at work. Conversely, people high in self-efficacy relish challenge because it gives them the opportunity to demonstrate competence in the task domain for which they feel competent. By being able to demonstrate their competence, leaders should perceive that they are more likely to earn the recognition and rewards which they feel their abilities deserve. In the end, having the opportunity to demonstrate competence gets the leader feeling excited and energetic about the demands. Moreover, leaders become more willing to immerse themselves in their work when they feel that the challenges of leadership are mechanisms for demonstrating certain leadership competencies which they feel they possess.

Taken together, the arguments above suggest that high-LSE leaders should react to leadership challenge demands with more engagement because they experience a heightened sense of meaningfulness and authenticity at work; they feel a greater degree of commitment to persevere in meeting the challenge demands with which they are

confronted; and they view the challenge demands as opportunities to demonstrate their competence and thus earn more recognition. In turn, leaders feel more energetic, focused, and dedicated at work. Thus, the following hypothesis is put forth:

*Hypothesis 2b: LSE will moderate the positive relationship between leadership challenge demands and engagement such that the relationship will be stronger when LSE is high.*

**Effects of Engagement and Burnout on Leader Behaviors**

Up to this point, I have discussed how leaders high on LSE will tend to react to leadership challenge demands with engagement, whereas leaders low on LSE will tend to experience burnout in response to leadership challenge demands. I will now discuss how feelings of engagement should be related to follower perceptions of the leader displaying transformational leadership behaviors, and conversely, how burnout is related to passive and abusive leadership behaviors.

One of the main tenets of transactional stress theory is that affective-motivational reactions to challenge demands trigger certain coping behaviors. Coping behaviors are defined as "conscious, volitional attempts to regulate the environment or one's reaction to the environment under stressful conditions" (Connor-Smith & Flachsbart, 2007, p. 1080; see also Compas et al., 2001; Skinner, Edge, Altman, & Sherwood, 2003). Numerous taxonomies have been developed to capture the types of coping behaviors that individuals display. For example, Lazarus and Folkman (1984) proposed two main types of coping behaviors: problem-solving coping and emotion-focused coping. Problem-solving coping is defined broadly as behavior intended to deal with the demands, whereas emotion-focused coping refers to attempts to deal with negative emotions stemming from

the demands. In essence, the Lazarus and Folkman perspective of coping behavior emphasizes people's cognitive focus (demands vs. emotion) when faced with demands. This framework has largely been criticized, however, for focusing more on coping cognitions rather than coping behavior. Numerous different taxonomies have thus been developed to explain different types of coping behaviors. However, in an effort to tie these different taxonomies together and achieve consensus on how to best categorize coping behaviors, recent confirmatory factor analyses (e.g., Connor-Smith, Compas, Wadsworth, Thomsen, & Sitzman, 2000; Connor-Smith & Flachsbart, 2007) have uncovered three broad families of coping behaviors: engagement coping, broad disengagement coping, and negative emotion focused coping.

For my theoretical model, I have chosen to include leadership behaviors that are reflective of these three broad coping behaviors. The primary basis for viewing leadership behaviors as reflective of coping behaviors lies in the conceptual overlap of stress coping and leadership behavior. Specifically, like stress coping behaviors, leadership behaviors are conscious, volitional attempts to regulate a leader's environment (Yukl, 2009). For example, effective leaders regulate their environment by mobilizing, coordinating, and motivating their subordinates' efforts toward the achievement of a common goal. At the same time, leadership behaviors are similar to coping behaviors in that they are not just attempts to regulate one's environment, but are often *reactions* to one's environments. For example, crisis situations have been shown to make leaders more transformational (House et al., 1991; Pillai & Meindl, 1998), while perceptions of procedural injustice have been found to trigger abusive supervision (Aryee, Chen, Sun, & Debrah, 2007; Tepper, Duffy, Henle, & Lambert, 2006). Still, one might argue that a

number of other work behaviors examined by organizational scientists conceptually overlap with coping behaviors. For example, performance, absenteeism, withdrawal, and aggression could be considered as volitional attempts to regulate one's environment or as reactions to the environment and therefore reflective of coping behaviors. However, if that is in fact the case, then there is no reason why leadership behaviors should not also be explored as a specific type of work behavior that is reflective of coping behavior.

Taken together, these arguments suggest that there is a great deal of conceptual overlap between coping behavior and leadership behavior. In the end, this helps justify my selection of leadership behaviors based on coping behaviors identified in the stress literature. Thus, transformational leadership is proposed to be reflective of engagement coping behaviors; passive leadership of broad disengagement coping behaviors; and abusive supervision of negative emotion focused coping behaviors. More detail about why these leadership behaviors are proposed to be reflective of these coping behaviors is given in the following sections. In addition, I will provide theoretical justification for my hypotheses regarding the effects of engagement on transformational leadership, and the effects of burnout on passive leadership and abusive supervision.

**Effects of Engagement on Transformational Leadership**

According to my theoretical model, leaders high on LSE who face high leadership challenge demands should feel highly engaged in their work. In turn, the model predicts that engaged leaders will be perceived as transformational in their leadership behavior. The engagement-transformational leadership linkage is based on transactional stress theory's premise that positive affective-motivational states such as engagement trigger engagement coping behaviors, as well as my assertion that transformational leadership is

reflective of engagement coping behaviors. In saying this, I should clarify the distinction between *engagement* as defined by Kahn (1990) and Schaufeli et al. (2002), and *engagement coping* as defined in the literature on stress coping behaviors. These two lines of research have developed entirely independent of each other, such that the similar variable labels are more or less just a semantic coincidence. In particular, engagement as defined in the previous section and conceptualized in my study refers to an affective-motivational *state* that stems from the interaction between challenge demands and LSE. Engagement coping, on the other hand, entails *behaviors* that result from affective-motivational states like engagement. The same can be said for the distinction between burnout and disengagement coping. With that clarification, I will now move on to defining transformational leadership, briefly review prior research on transformational leadership, and discuss the basis for including transformational leadership, as opposed to other leadership behavior constructs, as an outcome of engagement.

**Transformational leadership.** Since it was first introduced to the leadership literature by Bass (1985), transformational leadership has been the most frequently researched leadership behavior among leadership scholars (Avolio, Walumbwa, & Weber, 2009). Transformational leadership refers to a set of leadership behaviors that motivate followers to transcend their own self-interest and work for the benefit of the group or organization (Bass, 1985). There are four such behaviors identified in transformational leadership theory: inspirational motivation, idealized influence, intellectual stimulation, and individualized consideration. *Inspirational motivation* refers to the leader enthusiastically articulating a compelling vision. *Idealized influence* refers to the leader serving as an effective role model and acting in ways that are consistent with

the vision that he or she has articulated. *Intellectual stimulation* refers to leaders challenging assumptions, soliciting followers' ideas and suggestions, and encouraging new ways of approaching problems. Finally, *individualized consideration* refers to leaders building relationships with followers and considering their individual needs, skills, and values. While each of these dimensions of transformational leadership is discussed at length by Bass (1985), research has overwhelmingly demonstrated that the four dimensions load on a single higher-order transformational leadership factor. Indeed, Judge and Piccolo (2004) found that the mean correlation between each of the transformational leadership dimensions is .83.

Transformational leadership is commonly assessed by the Multifactor Leadership Questionnaire (MLQ) developed by Bass and Avolio (1997). The MLQ measures what Bass and colleagues refer to as the *full range model of leadership*. Behaviors included in the full range model of leadership besides transformational leadership include contingent reward, management-by-exception active, and passive leadership (i.e., management-by-exception passive and laissez-faire). However, within the full range model, transformational leadership is argued to be the most effective leadership behavior. Several meta-analyses have confirmed the effectiveness of transformational leadership by finding that it is highly predictive of attitudinal and performance-related outcomes at the follower, group, and organization levels of analysis (Judge & Piccolo, 2004; Wang, Oh, Courtright, & Colbert, 2011). Outcomes of transformational leadership include increased task performance, citizenship performance, creativity, job satisfaction, group performance, organizational performance, and follower motivation. There is also a

strong correlation between transformational leadership and perceptions of leader effectiveness (Judge & Piccolo, 2004).

Although a large body of research exists on the outcomes of transformational leadership—in fact, Judge and Piccolo (2004) noted that more work has been done on transformational leadership than any previous leadership paradigms combined—there has been far less work done on antecedents to transformational leadership (as noted in Chapter 1). Without a doubt, the most frequently examined antecedent of transformational leadership has been personality. In a meta-analysis, Bono and Judge (2004) found that two of the Big Five personality traits—extraversion and neuroticism—had small to moderate relationships with transformational leadership ($\rho$ = .24 and -.17, respectively). Moreover, all the Big Five personality traits—extraversion, neuroticism, openness to experience, conscientiousness, agreeableness—had a multiple correlation (*R*) of .31with transformational leadership. Besides personality, researchers have investigated other individual differences as predictors of transformational leadership. For example, in a meta-analysis of 45 studies, Eagly, Johannesen-Schmidt, and Van Engen (2003) found that females were slightly more transformational than males (d = .10). Furthermore, another meta-analysis by Harms and Crede (2010) on the relationship between emotional intelligence and transformational leadership uncovered a corrected correlation of only .12 between the two constructs. Finally, in a large scale meta-analysis on leader traits as predictors of leadership effectiveness, DeRue et al. (in press) found cognitive ability to likewise exhibit a small relationship with transformational leadership ($\rho$ = .16). The key takeaway from these studies is that while individual leader attributes

do predict transformational leadership to a certain extent, there is still a significant amount of variance in transformational leadership left to be explained.

To help explain more variance in transformational leadership, a few studies have examined psychological states and contextual characteristics as predictors of transformational leadership. For example, Barbuto (2005) found that leaders' intrinsic task motivation was positively related to follower perceptions of transformational leadership. Similarly, Martin and Bush (2006) found that leaders' psychological empowerment was related to follower perceptions of transformational leadership behavior. These are the only two studies, however, which have examined how affective or motivational states impact transformational leadership. Thus, investigating the direct link between engagement and transformational leadership represents a significant empirical contribution to the literature. Moreover, as will be noted in a subsequent section, no prior study has ever investigated how an affective-motivational state like engagement mediates the relationship between contextual characteristics like leadership challenge demands and transformational leadership.

**Basis for including transformational leadership.** As noted earlier, I have selected transformational leadership as an outcome of engagement based on the notion that positive-valenced affective states will trigger engagement coping behaviors, which are more constructive coping behaviors by nature. I argue that transformational leadership, more than any other constructive form of leadership, captures the *full* essence of engagement coping. The chief reason is that engagement coping, like transformational leadership, is broad in scope (Yukl, 2009). Yet, the behaviors entailed in engagement coping and transformational leadership share a great deal of overlap. For example,

engagement coping behaviors include implementing solutions, initiating change in the environment, and soliciting input and advice. These behaviors are captured in the dimension of intellectual stimulation in transformational leadership theory. Engagement coping behaviors also entail actively seeking out and building close relationships with others. These behaviors are captured in the individualized consideration dimension of transformational leadership. Finally, the common thread in engagement coping is proactive attempts to regulate one's environment. According to Bass and Avolio (1994), the four components of transformational leadership are prototypical proactive leadership behaviors (see also Block, 2003).

An argument could be made to investigate more narrow forms of leadership instead of transformational leadership. For example, leader-member exchange involves seeking closeness with others (Graen & Uhl-Bien, 1995), while initiating structure (Judge, Piccolo, & Ilies, 2004; Stogdill, 1950) involves some elements related to implementing solutions. However, the advantage of examining a broad form of leadership behavior like transformational leadership is that it is more comprehensive in its coverage of engagement coping. In other words, more narrow forms of leadership would miss several other aspects of engagement coping, and therefore not be as congruent with my theoretical model as transformational leadership. Thus, in terms of identifying a leadership behavior that is most closely reflective of the broad concept of engagement coping and thus congruent with my theoretical framework, transformational leadership seems to the most optimal choice.

**Hypothesized relationship.** While engagement theory (Kahn 1990, 1992; Schaufeli et al., 2002) does not specifically link engagement with transformational

leadership, the theory does point to a number of behaviors that result from engagement that are captured by transformational leadership. First, because engaged workers feel energetic and emotionally connected to their work, they are more attentive to and connected with others' feelings (Kahn, 1990). Kahn (1992) also found that engaged project managers were more open rather than closed to others (Gibb, 1961); that is, "they experience themselves as accessible to people or tasks, as reserves to be drawn upon" (Kahn, 1992, p. 323). Related to this notion, Isen (1984) argued that people in a positive affective state like engagement are more likely to help others because they are more perceptive of needs, feel a greater need to help, and have more energy to do so. This notion has since been empirically confirmed several times (George, 1991; Ilies, Scott, & Judge, 2006; Miles, Borman, Spector, & Fox, 2002; Rich et al., 2010). Hence, a leader high on engagement should be perceived as being considerate of followers' individual needs because followers feel more emotionally connected to an engaged leader and because an engaged leader is more likely to provide help and assistance to his or her followers.

Kahn (1990, 1992) also suggests that the more engrossed people are in their work, the more likely they are to question existing assumptions and generate creative solutions. Thus, in the context of our study, leaders who are absorbed in and dedicated to their work are more likely to be intellectually stimulating leaders. This happens because greater absorption allows a leader to better detect and identify areas where improvement is needed. In the process of identifying areas of improvement, leaders will challenge assumptions about how tasks are completed and, because of their personal connection to subordinates, tend to solicit their help in identifying and solving work-related problems

(Kahn, 1992). For example, Kahn (1990) found that a highly engaged senior designer who was leading a team of architects was consistently found "exhorting team members to think about how the clients would actually use the work, [and] questioning the chief architect's assumptions about the design" (p. 701). Furthermore, Kahn (1992) noted that engaged project managers helped their groups and organizations "to become unstuck and move toward new and productive ways of working" (p. 325). It is clear, then, that the behaviors Kahn witnessed among senior designers and project managers are reflective of intellectual stimulation.

The fact that an engaged leader is one who feels energetic, dedicated, and absorbed in his or her work also means that the leader will also tend to be perceived as a role model. For example, studies have shown that engaged workers have higher ratings of in-role and extra-role performance (Rich et al., 2010; Saks, 2006). In other words, those high on engagement tend to meet organizational expectations and are thus perceived as significant organizational contributors. When a leader is perceived as being a significant contributor to the organization, he or she will be perceived by followers as a role model worthy of emulation. Finally, because highly engaged leaders feel a sense of excitement and dedication at work, they are more likely to transfer that enthusiasm and optimism in their leadership behavior. Thus, leaders high on engagement should be seen as displaying idealized influence and inspirational motivation behaviors.

Taken together, these arguments point to the following hypothesis:

*Hypothesis 3: Leaders' work engagement is positively associated with follower perceptions of transformational leadership.*

**Effects of Burnout on Destructive Leader Behaviors**

My research model predicts that leaders who face high leadership challenge demands and are low in LSE will experience burnout. Burnout, in turn, is predicted to result in two potential "destructive" leadership behaviors: passive leadership and abusive supervision. Below, I review and define these two types of leadership behavior, argue for their relevance in my research model, and end by explaining why burnout can lead to either of these leadership behaviors.

**Passive leadership.** Part of the full range model of leadership is Bass's notion of passive leadership. Specifically, passive leadership is composed of two dimensions in the full range model: management-by-exception passive (MBE-P) and laissez-faire (Bass &Avolio, 1997; Bono & Judge, 2004; DeRue et al., in press). MBE-P leadership behavior is defined as reactive leadership behavior. For example, leaders who exhibit this behavior fail to interfere before problems become serious. Laissez-faire leadership is essentially non-leadership or the absence of leadership. Laissez-faire leaders avoid making decisions, are frequently absent, and avoid getting involved with work issues. Passive leadership thus represents leader inaction and avoidance. Leaders who are passive fail to recognize followers (Hinkin & Schriesheim, 2008) and, to the extent they do get involved as leaders, they only intervene when problems become chronically serious. Passive leaders delay or altogether avoid making decisions, are frequently absent when needed, and fail to follow up on follower responsibilities.

These behaviors naturally have negative impacts on followers and groups. For example, not only have followers of passive leaders been meta-analytically shown to be less productive, less satisfied, and less motivated in their work (Judge & Piccolo, 2004),

but evidence also suggests that followers with passive leaders are more likely to report somatic health complaints and to become victims of workplace bullying (Skogstad, Einarsen, Torsheim, Aasland, & Hetland, 2007). Moreover, groups with passive leaders tend to have dysfunctional patterns of member interactions (Bass, Avolio, Jung, & Berson, 2004). Judge and Piccolo (2004) likewise demonstrated that passive leadership leads to severe decrements in group performance. Hence, in order to shed more light on the problems associated with passive leadership, there has recently been a push toward framing it as a form of "destructive" leadership behavior (Einarsen et al., 2007; Hinkin & Schriesheim, 2008; Skogstad et al., 2007). This approach is justified when considering the plethora of evidence suggesting the harm that passive leaders inflict on their followers—whether intentionally or unintentionally.

Because passive leadership is part of the full range model, most studies examine it in conjunction with transformational leadership. In doing so, the negative effects of passive leadership are often overshadowed by scholars' emphasis on the positive effects of transformational leadership. However, many researchers have in recent years noted the need to examine passive leadership more closely and to examine it separate from transformational leadership (Einarsen et al., 2007; Hinkin & Schriesheim, 2008; Skogstad et al., 2007). Although work in this regard is slowly gaining momentum, it is interesting to note that, to my knowledge, no studies have investigated non-individual difference predictors of passive leadership. Bono and Judge (2004) did meta-analyze over a dozen studies that examined Big Five personality traits as antecedents of passive leadership. Overall, their findings indicated relatively weak relationships between personality and passive leadership, with the strongest corrected correlations being -.12 and -.11 for

conscientiousness and agreeableness, respectively. Moreover, the multiple correlation between all of the Big Five traits and passive leadership was .17. As with transformational leadership, this points to a suggested role of situational antecedents that can influence passive leadership.

Nevertheless, there is not a theoretical framework that exists wherein potential antecedents to passive leadership are identified. The reason for this is likely due to the field of leadership's focus on largely positive leadership behaviors. However, with more and more emphasis being place on destructive forms of leadership behavior such as passive leadership, it behooves researchers to uncover what causes leaders to behave in destructive ways (Einarsen et al., 2007). A significant contribution of this study is to fill this gap. Indeed, the present study is the first of its kind to study non-individual difference predictors of passive leadership.

**Abusive supervision.** Another "destructive" form of leadership potentially stemming from managerial burnout is abusive supervision. Tepper (2000) first introduced the construct of abusive supervision and defined it as "the sustained display of hostile verbal and nonverbal behaviors, excluding physical contact" (p. 178). Tepper developed a 15-item scale measuring a host of abusive behaviors that leaders potentially display. These behaviors include active forms of hostility such as being rude to subordinates, putting subordinates down in front of others, telling subordinates that their thoughts and feelings are stupid, and calling subordinates incompetent. At the same time, abusive behaviors can also be displayed in more passive forms such as giving the silent treatment, breaking promises, taking credit for subordinates' success, or blaming subordinates for personal failures. A recent study by Mitchell and Ambrose (2007)

subjected Tepper's abusive supervision scale to confirmatory factor analysis and found that the scale indeed revealed two factors reflecting active and passive forms of abuse. I have chosen to focus on active abusive behaviors mainly because active-aggressive abuse is more reflective of negative emotion focused coping behaviors than passive-aggressive abuse (Connor-Smith & Flachsbart, 2007). Moreover, there are much clearer theoretical ties between burnout and the active-aggressive abuse factor than with the passive-aggressive abuse factor.

Research on abusive supervision has burgeoned in the decade since Tepper's foundational study on the topic. The vast majority of this research has focused on consequences of abusive supervision. Tepper (2007) reviewed the work in this area and found that the consequences of abusive supervision are quite broad, ranging from decreased job satisfaction (e.g., Tepper, 2000) and job performance (e.g., Harris, Kacmar, & Zivnuska, 2007) to increased emotional exhaustion, job strain, and psychological distress (e.g., Bamberger & Bacharach, 2006; Tepper, Moss, Lockhart, & Carr, 2007). Moreover, subordinates of abusive supervisors have been found to engage in more counterproductive behavior and report higher incidents of problem drinking, somatic health complaints, and work-family conflict (e.g., Hoobler & Brass, 2006; Mitchell & Ambrose, 2007; Tepper et al., 2007). It is thus plain to see that abusive supervision is a destructive form of leadership in that it takes a toll on workers' performance, attitude, health, and family life.

As is typical of other leadership behavior constructs, very little work has been done on antecedents to abusive supervision. Specifically, only four studies have investigated antecedents of abusive supervision. In terms of dispositional antecedents,

Wu and Hu (2009) found that core self-evaluations were negatively related to abusive supervision. In terms of contextual or psychological antecedents, Tepper et al. (2006) showed that supervisors' perceptions of procedural injustice and subordinates' negative affectivity triggered abusive supervision. Similarly, Aryee et al. (2007) found supervisors' perceptions of interactional injustice as a predictor of abusive supervision. Hoobler and Brass (2006) demonstrated that when supervisors perceived a violation of a psychological contract, they were more likely to be abusive toward subordinates. Finally, a recent study by Restubog, Scott, and Zagenczyk (2011) found that aggressive organizational norms triggered higher levels of abusive supervision.

It is noteworthy to mention that the ratio of studies focusing on antecedents versus consequences of abusive supervision is larger than those for either transformational or passive leadership behaviors. Still, the current study represents the first study to link burnout with abusive supervision, and, as will be noted in a subsequent section, the first to examine an affective-motivational state (burnout) as a mediator in the relationship between a contextual antecedent (leadership challenge demands) and abusive supervision.

**Basis for passive leadership and abusive supervision.** Over 80 years ago, Cannon (1929) found that strain and burnout symptoms tended to trigger two fundamental responses: "fight" or "flight". Whereas the "fight" response is manifested in aggressive, argumentative, and confrontational behaviors, the "flight" response is manifested through withdrawal and avoidance behaviors. It should be noted that although some individuals may react to burnout with "flight" rather than "fight" behaviors (and vice-versa), it is also possible that individuals experiencing burnout can

display both of these behaviors simultaneously (Chen & Spector, 1992; Fox & Spector, 1999). Thus, both of these possibilities are considered in this research.

At any rate, stress research has, over the years, provided a good deal of support to Cannon's claims of withdrawal/avoidance and hostility being two critical outcomes of strain. In particular, as noted earlier, meta-analysis has shown that fight and flight responses are included among the dimensions of stress coping behaviors that result from negative affective-motivational responses to demands. For example, *broad disengagement coping* is defined as a broad category of responses directed toward avoiding or withdrawing from the demand. Passive leadership is best reflective of broad disengagement coping in that passive leadership entails the leader avoiding interactions with subordinates, evading decision making, and being absent when needed (Bass, 1985). Additionally, *negative emotion focused coping* refers to individuals expressing hostility and anger towards others in response to stress. This category of coping behavior is best reflected by abusive supervision in that abusive supervision entails the sustained display of hostile verbal and nonverbal behaviors (Tepper, 2000). Thus, in terms of capturing leadership-oriented behavioral responses to burnout that are consistent with Cannon's perspective of strain responses and prevalent stress coping models, passive leadership and abusive supervision appear to be the most optimal leadership behaviors to examine as outcomes of managerial burnout.

**Hypothesized relationships.** Stress theorists who have emphasized fight and flight responses to burnout have posited a number of underlying reasons for these responses. Though most of the work in this area has focused on predicting aggression or withdrawal/avoidance on nonmanagerial employees, the theoretical perspectives these

researchers offer can be applied equally as well to my prediction regarding the effects of managerial burnout on leadership behaviors that entail aggression (abusive supervision) and withdrawal/avoidance (passive leadership).

Burnout is a distressing, aversive affective-motivational state because it entails individuals feeling there is little that can be done about the demands they face. In other words, burned out individuals feel a loss of personal control and perceive that there is little hope of achieving the benefits that challenge demands are supposed to bring (Folkman, 1982). Lazarus and Folkman (1984) argue that those who experience burnout symptoms will tend to focus solely on dealing with the emotional disturbance caused by the demands rather than the demands themselves. Humans are naturally prone to wanting to quell feelings of emotional distress and feel a sense of control. Thus, dealing with the emotional disturbance of burnout essentially entails finding ways to make oneself "feel better"; that is, engaging in behavior that focuses on minimizing negative emotions and regaining the sense of control that they have lost from feeling burned out (Spector & Fox, 2002).

In this vein, reactance theory (Brehm & Brehm, 1981) was used by Burisch (1996) to explain why individuals who are burned out are more likely to display aggressive behavior as a way to minimize negative feelings. In particular, reactance theory suggests that all individuals have a need for personal control, and feeling a lack of control leads to aversive, negative emotions. In this vein, Bandura (1986) suggests that people become saddened, depressed, and burned out "by their perceived inefficacy to control highly valued outcomes" (p. 447) such as those that come about by meeting challenge demands. Hence, leaders who are burned out feel a loss of control (Cox &

Leiter, 1992). According to reactance theory, when control is perceived to be lost and negative emotions surface as a result of this loss of control, then individuals sometimes seek to restore a sense of control and minimize negative feelings by acting out on others aggressively. For supervisors, this likely means acting out on subordinates, particularly if leaders see followers as playing a part in the demands which have caused them to feel burned out (Perrewé & Zellars, 1999). For example, Maslach (1976) proposed that burnout emerges in large part from consistent interaction with people. As proposed earlier, several leadership challenge demands entail a high level of interpersonal contact with subordinates, such as managing diversity and mentoring. To the extent that leaders feel burned out from these relational demands, they may lash out against subordinates in an effort to "even the score" and feel less of the emotional distress that stems from burnout (Andersson & Pearson, 1999; Eby et al., 2007; Fox & Spector, 1999; Lavelle, Rupp, & Brockner, 2007; Spector & Fox, 2002). Indeed, this notion of leaders directly retaliating against the perceived source of one's troubles (subordinates) is a fundamental premise of aggression theories (Ashforth, 1997; Duffy, Ganster, & Pagon, 2002; Spector & Fox, 2002).

That said, evidence also suggests that even if subordinates are not the sole cause of leaders' burnout, leaders may nonetheless engage in what aggression researchers refer to as "displaced aggression", or aggressing against a seemingly innocent yet convenient target, as another way to minimize negative emotions arising from burnout and to regain a sense of control (Denson, Pedersen, & Miller, 2006; Dollard, Doob, Miller, Mowrer, & Sears, 1939). For instance, a great deal of research has shown that people who experience frustration—an emotion embedded within the broader burnout construct—

often react to the frustration through displaced aggression (Marcus-Newhall, Pedersen, Carlson, & Miller, 2000; Spector & Fox, 2002). This same logic can be applied to leaders as well. Leaders experiencing burnout may still abuse their subordinates as an act of displaced aggression out of feelings of frustration and as an attempt to minimize negative emotions and regain control—even if relational demands are not the primary cause of burnout (Hoobler & Brass, 2006).

Although this is the first study to test the effects of burnout on abusive supervision, support for this hypothesis comes from the literature on counterproductive work behaviors and organizational deviance. For example, Mulki et al. (2006) found that emotional exhaustion was related to greater workplace deviance in the form of interpersonal hostility toward co-workers and bosses. Moreover, numerous studies have supported the relationship between feelings of frustration and aggression (e.g., Fox & Spector, 1999). Finally, van Jaarsveld et al. (2010) recently found that feelings of emotional exhaustion were related to higher levels of employee incivility. Based on these findings and the reasoning given above, the following hypothesis is proposed:

*Hypothesis 4a: Burnout is positively associated with follower perceptions of abusive supervision.*

Besides burnout potentially leading to higher levels of abusive supervision, leaders experiencing burnout may also react with passive leadership behaviors (Lazarus & Folkman, 1991; Lee & Ashforth, 1996; Roth & Cohen, 1986). Perhaps the most basic argument that can be made for the relationship between burnout and passive leadership is the fact that negative affective-motivational states like burnout are linked not only to higher rates of aggression, but also to psychological withdrawal from work (Lee &

Ashforth, 1996). More specifically, an argument similar to that provided for the burnout–abusive supervision relationship can be used to explain the theoretical underpinnings of the burnout–passive leadership relationship. For instance, leaders who experience burnout will try to avoid the distress of burnout by retreating from whatever is perceived to be causing the burnout. This withdrawal from leadership duties minimizes, at least in the leader's mind, the negative emotions involved with burnout and assists the leader in regaining a sense of psychological control. Thus, in the context of the present study, if we assume that leadership challenge demands are a source of leader burnout, then the leader will retreat from his or her leadership roles in an effort to escape the negative emotions that arise from burnout troubles. For example, leaders burned out from various relational demands like mentoring followers may choose to avoid their subordinates if they perceive that subordinates are the root cause of their burnout symptoms. In the mentoring literature, for instance, Eby et al. (2007) found that mentors tend to become burned out when they perceive their protégés as having performance problems or engaging in destructive relational patterns such as jealousy, competitiveness, or breaching trust. In turn, burned out mentors provide less mentoring and tend to withdraw from relationships with their subordinates. Withdrawing from subordinates—a characteristic of passive leadership—thus allows leaders to minimize negative emotions stemming from burnout.

At the same time, there is a possibility that passive leadership, like abusive supervision, could be a form of passive aggression that leaders use in order to retaliate and thereby regain a greater sense of control. For example, most models of counterproductive work behavior include various withdrawal behaviors such as missing

meetings, being absent from work, or not responding to work-related problems that arise (Rotundo & Sackett, 2002). In the literature on counter productive work behaviors, such withdrawal behaviors are often theorized to be forms of retaliation against an organization or its members (Bennett & Robinson, 2000). In this sense, just as burned out leaders may engage in retaliatory abusive supervision behaviors as a way to minimize the negative feelings and loss of control associated with burnout, so too can burned out leaders display passive leadership as a form of retaliation and control seeking that minimizes, at least in their minds, the negative emotional effects of burnout. In accordance with this reasoning and the findings reported above, I put forth the following hypothesis:

*Hypothesis 4b: Burnout is positively associated with follower perceptions of passive leadership.*

## Integrated Models

Although the preceding hypotheses have focused on explaining the individual paths proposed in my theoretical model, in the end all my hypotheses point to a set of integrated models that combine moderation with mediation. Indeed, consistent with the process-oriented nature of the transactional theory of stress, it is necessary to not only establish theoretical links between each path in my model, but to also propose integrated models wherein the effects of leadership challenge demands on leadership behaviors are viewed as an actual *process* rather than a set of isolated relationships (Tepper, Henle, Lambert, Giacalone, & Duffy, 2008). In this vein, the transactional theory of stress is itself reflective of a mediated-moderation model wherein the relationship between job demands (leadership challenge demands) and coping behaviors (leadership behaviors) are

mediated by affective-motivational reactions (engagement and burnout), with the strength of this mediated relationship depending on the nature of the secondary appraisal (LSE).

Interestingly, however, even though the transactional model of stress is process oriented, rarely have studies looked at the entirety of this process in a single research model (Cooper et al., 2001). For example, a large amount of studies have examined the effects of challenge and hindrance demands on affective or motivational states (Crawford et al., 2010) without investigating, however, the behavioral reactions that stem from these states, or how secondary appraisals interact with job demands to influence affective-motivational reactions. The large amount of studies which do examine how job demands interact with elements of the secondary appraisal like social support, feedback, or autonomy typically focus on affective outcomes while ignoring behavioral outcomes that stem from these affective responses (Cooper et al., 2001). Finally, there are many studies that have examined the effects of affective responses like burnout and engagement on various coping behaviors (Lee & Ashforth, 1996), but these studies often ignore the appraisal processes that trigger these affective responses in the first place. The point here is not to be critical of past studies, but, rather, to point out the dearth of research that explicitly examines the entirety of transactional theory of stress.

The need to integrate and examine the entire process whereby job demands influence behavioral outcomes is especially important for the present study. Indeed, the crux of my study and its primary contribution lies in examining how leadership challenge demands come to influence transformational leadership, abusive supervision, and passive leadership. In examining how leadership challenge demands come to influence leadership behaviors, engagement and burnout are proposed as linking mechanisms. This

study represents the first attempt to examine affective-motivational states (burnout and engagement) as linking mechanisms between contextual factors (leadership challenge demands) and leadership behaviors (transformational, abusive, passive). Moreover, I have proposed that whether a leader becomes more engaged or burned out—and thus transformational, abusive, or passive in their behavior—depends on the strength of the leader's self-efficacy for carrying out his or her leadership functions and roles. It is thus necessary to test this integrated process model using new and improved methods of combining moderation and mediation (Edwards & Lambert, 2007).

In sum, my research model should ultimately be viewed as a process model wherein I explain how leadership challenge demands come to influence leadership behaviors. Leaders who respond to leadership challenge demands through the engagement mechanism (via high LSE) will tend to be more transformational leaders. Conversely, leaders who respond to leadership challenge demands through the burnout mechanism (via low LSE) will tend to be abusive or passive leaders. In this sense, engagement and burnout are mediators of the relationship between leadership challenge demands and leadership behaviors, with LSE serving as a moderator of this mediated relationship. My model thus points to three integrated models reflecting a combination of mediation and moderation. These proposed models are stated formally in the following hypotheses:

> *Hypothesis 5a: The indirect effect of leadership challenge demands on transformational leadership (through engagement) will be stronger for leaders high on LSE.*

*Hypothesis 5b: The indirect effect of leadership challenge demands on abusive supervision (through burnout) will be stronger for leaders low on LSE.*

*Hypothesis 5c: The indirect effect of leadership challenge demands on passive leadership (through burnout) will be stronger for leaders low on LSE.*

# CHAPTER III

# STUDY METHODOLOGY

The purpose of this chapter is to describe the field study wherein I tested my theoretical model. First, I describe the sample in which the model was tested and the procedures I followed while conducting the study. Second, I explain the various measurement instruments used to measure the constructs in my model. Finally, I describe the analytic strategies employed to test my hypotheses.

## Method

### Participants and Procedures

Leaders and direct reports from a large division of a *Fortune 500* manufacturing company were recruited to participate in the research. The leaders invited to participate in the study were considered mid-level managers in the organization and were all located in the United States and Canada. They worked in a variety of functions, including sales, information technology, legal support, and financial services. Whether a person in the organization was considered a "leader" was determined by position authority within the organization and by whether the individual in the organization had least two or more direct reports. The organization provided a list of the names and contact information of managers who met these criteria, and from this information I was able to invite leaders to participate in the research. To encourage participation, the division CEO sent organization members an e-mail detailing the purposes of the study and encouraged people to participate in the research. I then sent an e-mail to each potential leader participant inviting them to participate in the study. In the e-mail, I provided a link to an online survey powered by Survey Monkey from which survey responses were collected.

Two-hundred and twenty managers in the organization were invited to participate in the study. Data were collected at three points in time—twice from managers and once from direct reports. For Survey 1, which was administered in April 2011, managers responded to a series of questions that measured leadership challenge demands and leadership self-efficacy. They also provided demographic information such as age, sex, educational attainment, tenure in the organization, tenure as a manager in any capacity at any company (i.e., total managerial experience), and tenure in their current management position. A total of 174 managers returned the first survey, representing a 79% response rate. Three months after Survey 1 was completed, managers who chose to participate in the study were e-mailed the link to the second online survey. On Survey 2, they were asked to respond to questions related to engagement, burnout and covariates including personality and negative family-to-work spillover. A total of 153 managers completed the second survey. Hence, 70% of managers completed both surveys. Details on the demographic composition of the participating managers are shown in Table 1.

For Survey 3, data was collected from direct reports one week after Survey 2 was completed by managers. Direct reports provided an assessment of their direct manager's leadership behavior and their own demographic information including age, sex, educational attainment, tenure in the organization, and tenure with current supervisor. As occurred with managers in the organization, the division CEO sent all direct reports an e-mail containing the purposes of the research and encouraged them to participate in the research. I then e-mailed the direct reports of the managers who at least completed Survey 1 and invited them to participate in the study. This was done using a database provided to me by the organization. Included in my e-mail was a link to an electronic

survey powered by Survey Monkey from which responses were collected. Of the 867 direct reports invited to participate, a total of 712 completed the survey, representing an 82% response rate and an average of 4.09 direct reports per leader. However, some of these direct reports belonged to leaders who only completed the first survey. There were 631 direct reports who completed the survey who also had managers that completed Surveys 1 and 2. Thus, the final sample after accounting for missing data across the three phases of the research was 153 managers and 631 direct reports (4.12 direct reports per leader). Details regarding the demographic composition of the participating direct reports are likewise displayed in Table 1.

**Measures**

**Leadership challenge demands.** Leaders' perceptions of the extent to which they experience leadership challenge demands were measured at Time 1 using a 60-item scale. Forty-five of the items were taken from the *Job Challenge Profile* (JCP; McCauley et al., 1999), and 15 of the items came from two scales developed specifically for this research. The leadership challenge demands assessed by the JCP are creating change (15 items), managing boundaries (10 items), high level of responsibility (10 items), and managing surface-level diversity (10 items). On the JCP, leaders are provided a number of statements that may describe something they face in their current job. Leaders then indicate how well the statement describes what they face in their job. The items are measured on a 5-point scale ranging from *not at all descriptive* (1) to *extremely descriptive* (5). Sample items include "You have to make major strategic changes in the business—its direction, structure, technology systems, or operations" (creating change), "You are responsible for multiple functions or groups" (high level of

responsibility), "To achieve your most important goals, you must influence peers at similar levels in other units, functions, divisions, and so forth" (managing boundaries), and "In terms of demographic variables, you have a diverse group of direct reports" (managing surface-level diversity). It should be noted that I obtained written permission from the Center for Creative Leadership to use the JCP in this research.

To measure the dimensions of the leadership challenge demands construct that are not captured by the JCP (managing deep-level diversity and developing followers), I developed two scales specific for this study. Three steps were taken to ensure that these scales adequately captured the leadership challenge demands of managing deep-level diversity and developing followers. First, the items were developed based on well-cited theoretical frameworks pertaining to each dimension. Second, the items were worded in such a way that they mirrored the items already existing on the JCP. Finally, the items were examined by five subject matter experts (i.e., dissertation committee) and the organization sponsoring my research. Items were refined based on feedback from the subject matter experts and the sponsoring organization. The result of this process was a set of nine items capturing the *developing followers* dimension, and six items reflecting the *managing deep-level diversity* dimension. Like the JCP items, these items were measured on a 5-point scale ranging from *not at all descriptive* (1) to *extremely descriptive* (5). Each scale is described in further detail below.

In terms of developing items for managing deep-level diversity, I drew on frameworks by Bell (2007) and Harrison et al. (1998, 2001) that distinguish between deep-level and surface-level diversity (discussed in Chapter 2). In particular, the main deep-level attributes discussed by these scholars are personality, values, and skills. My

items thus focus on managing diversity on these deep-level attributes. Furthermore, I formed items that were as similar as possible, but not identical, to the managing surface-level diversity items put forth in the JCP, only that deep-level attributes were emphasized rather than surface-level attributes. The items created for this scale are as follows: "Your job requires managing people with diverse personalities and values," "You manage direct reports whose personalities and values are very different from your own," "You are often left guessing what your direct reports are thinking or how they will react to certain events," "Your direct reports possess different skills and expertise that have to be coordinated for the good or your group," "You have to get people with different personalities and values to get along and work together," and "You are required to build relationships with people who have difficult personalities." Coefficient alpha for this subscale was .80, thereby indicating that the items hung together well as indicators of the managing deep-level diversity dimension of leadership challenge demands.

Items for the developing followers scale were drawn from established theoretical frameworks on coaching and mentoring. In addition, the items were formed based on the feedback from subject matter experts and a leadership model adopted by the sponsoring organization which details specific coaching and mentoring tasks which they expect leaders to fulfill. In terms of coaching, the basis of the items was the notion that coaching involves providing one-on-one job training and feedback on direct reports' job performance (London, 2003; Yukl, 2003). For mentoring, on the other hand, the items were based on the notion that mentoring involves providing career-related advice and psychosocial support to direct reports (Kram, 1985). The items thus focused on the extent to which a manager's job requires providing training, performance feedback,

vocational advice, and social support. The scale contained the following items: "You are assigned as a formal mentor to one or more employees in the organization," "You are frequently called on to share your experience and expertise with your direct reports," "This job includes addressing work-life balance issues that your direct reports face," "You are required to help your direct reports set and monitor work goals," "Your job requires providing your direct reports substantial feedback on their performance and overall development," "Your job requires spending considerable time developing your direct reports," "You must coach your direct reports on how to carry out elements of their jobs," "You must teach your direct reports to carry out tasks with which they are unfamiliar," and "You have to develop successors for leadership positions." Coefficient alpha of this subscale was .77, indicating that the items hung together well as indicators of the developing followers dimension of leadership challenge demands.

To construct the leadership challenge demands measure, I aggregated the scores from each of the six dimensions into a single composite score. This approach is consistent with theory on developmental job components (McCauley et al., 1994) in that each set of demands are proposed to load on a higher-order factor representing overall challenge in a leader's job. To be even more precise, a composite model suggests that challenge in a leader's job is manifested through each of the task, relational, and change-oriented demands proposed in this study. Although this approach has been empirically validated in two recent studies (DeRue & Wellman, 2009; Dragoni et al., 2009), I decided to assess the validity of this measurement approach in the current study given the newness of this construct and the fact that I am adding two dimensions to the overall leadership challenge demands construct. First, I computed a composite reliability of the

leadership challenge demands measure to assess the degree of internal consistency within raters across items. Second, I conducted a confirmatory factor analysis (CFA) to assess the magnitude and significance of the path loadings between the indicator variables and the higher-order factor. Finally, I constructed an alternative measurement model to assess whether the fit of my measurement model is better when the various dimensions of leadership challenge demands are treated as indicators of a higher-order factor or as distinct factors. Regarding the first test, I found the composite reliability to be .92, proving that raters were consistent in their ratings of leadership challenge demands and providing at least a degree of initial support for the notion that each dimension of the leadership challenge demands construct loads on a second-order leadership challenge demands construct. The latter two tests are explained in Chapter 4 in connection with my discussion about the validity of my measurement model.

**Leadership self-efficacy.** Leaders rated their LSE at Time 1 using an 11-item scale developed by Ng et al. (2008). The reason I chose this scale is that it measures LSE as leader's confidence to carry out functions that relate to the three primary roles filled by leaders (noted in Chapter 2)—task, relational, and change-oriented roles. The items are measured on a 5-point Likert scale ranging from *not at all confident* (1) to *extremely confident* (5). Examples of the aspects of leadership on which leaders rate their confidence include "setting direction," "coordinating tasks," and "creating team spirit." Coefficient alpha for this scale was .89.

**Engagement.** At Time 2, leaders completed a 17-item scale developed by Schaufeli et al. (2002) to assess their level of engagement. This scale measures all three dimensions of engagement: vigor (6 items), dedication (5 items), and absorption (6

items). Items were measured on a 5-point Likert scale ranging from *strongly disagree* (1) to *strongly agree* (5). Example items include "When I get up in the morning, I feel like going to work" (vigor), "I am enthusiastic about the work that I do" (dedication), and "I feel happy when I am working intensely" (absorption). As with prior research, I took the average of all 17 items as the overall index of one's engagement. This approach is also supported by CFA results reported in Chapter 4. Coefficient alpha was .91.

**Burnout.** Also at Time 2, leaders provided self-assessments of burnout using a modified version of the MBI (Maslach & Jackson, 1981) that is geared specifically toward managers. This version of the MBI was first used by Lee and Ashforth (1993) and is specifically meant to capture managerial burnout. For example, items were modified to include items about "subordinates" rather "recipients" (e.g., "I feel some recipients blame me for some of their problems" was replaced with "I feel some subordinates blame me for some of their problems"). The MBI is the most frequently used measure of burnout in the literature (Cooper et al., 2001; Maslach et al., 2001). However, as noted in Chapter 2, I measured two of the three dimensions assessed in the MBI: emotional exhaustion (9 items)—which is the primary indicator of burnout—and cynicism (5 items). The measure thus contained 14 items that were measured on a 6-point frequency scale ranging from *never* (1) to *every day* (5). Sample items include "I feel frustrated by my job" (emotional exhaustion), "Working with my subordinates all day is really a strain for me" (emotional exhaustion), and "I really don't care what happens to some of my subordinates" (cynicism). As with prior research, I took the average of the 14 items as one's overall burnout score. This approach is further supported by CFA results reported in Chapter 4. That said, as will be discussed further in

Chapter 4, because emotional exhaustion is increasingly modeled as a construct in and of itself, I ran separate analyses where burnout was indicated solely by emotional exhaustion. Coefficient alpha was .88 for the composite measure. Emotional exhaustion by itself also had a coefficient alpha of .88. It should be noted that I purchased the rights to use the MBI from its publisher, Mind Garden, Inc.

**Transformational leadership.** Direct reports rated their immediate supervisor's transformational leadership behavior at Time 3 using 20 items from the MLQ-5x (Bass & Avolio, 1997). The MLQ-5x measures all four dimensions of transformational leadership—idealized influence (8 items), inspirational motivation (4 items), individualized consideration (4 items), and intellectual stimulation (4 items). Consistent with prior research which shows that the four factors of transformational leadership load onto a single higher-order factor (Judge & Piccolo, 2004), I adopted the average of the 20 items as a follower's overall transformational leadership rating of their immediate supervisor. Items on the MLQ-5x are measured using a 5-point frequency scale ranging from *not at all* (1) to *frequently, if not always* (5). Example items include "Seeks differing perspectives when solving problems" (intellectual stimulation), "Talks enthusiastically about what needs to be accomplished" (inspirational motivation), "Treats me as an individual rather than just as a member of a group" (individualized consideration), and "Instills pride in me for being associated with him/her" (idealized influence). Coefficient alpha for this scale was .94 at the item level and in the aggregated data (see below). As with the MBI, I purchased the rights to use the MLQ-5x from its publisher, Mind Garden, Inc.

As noted earlier, an average of 4.09 direct reports rated each leader on their leadership behaviors. Consistent with leadership research, I averaged across raters nested within leaders to obtain an average transformational leadership score for each leader. In other words, this approach constitutes an aggregation of leadership scores from the individual follower level to the leader level. Therefore, to test the appropriateness of this approach, I computed a number of aggregation indices based on the extant literature for transformational leadership and the other leadership behaviors included in my model. First, I computed $r_{wg(j)}$ because it serves as arguably the most common index of within-group agreement, that is, the degree to which direct reports in the same group provide essentially the same ratings of their supervisor's leadership behavior (James, Demaree, & Wolf, 1984). $r_{wg(j)}$ is calculated by comparing the observed group variance to an expected random variance, most often a uniform (rectangular) distribution in which it is assumed that variance in ratings is simply error variance. This assumption, however, is not regularly met in organizational research and often results in inflated $r_{wg(j)}$ values. For this reason, methodologists have called for computing $r_{wg(j)}$ based on other random variance distributions (LeBreton & Senter, 2008). Thus, in my study I calculate $r_{wg(j)}$ using both a uniform (rectangular) distribution and a skewed distribution, which is based on a leniency bias that is most typical of leadership ratings (Biemann, Cole, & Voelpel, in press). Values of $r_{wg(j)}$ above .70 are generally thought to provide strong evidence of within-group agreement on the variable of interest (LeBreton & Senter, 2008). For the current study, the $r_{wg(j)}$ for transformational leadership was .79 when using a uniform distribution and .70 when using a skewed distribution. Thus, there appears to be strong within-group

agreement on transformational leadership, thereby providing initial support for aggregation.

In addition to justifying aggregation of transformational leadership through $r_{wg(j)}$ values, I also computed ICC(1) and ICC(2) values. ICC(1) is calculated from an ANOVA model and is defined as the degree to which individual ratings can be explained by or are attributable to group membership. In other words, ICC(1) is essentially an effect size revealing the extent to which individual ratings are due to group membership. It should be noted there are no definitive cut-off scores for ICC(1), although most ICC(1) values are typically between .05 and .20, with a median value of .12 (Bliese, 2000). Within that range, certain values of ICC(1) indicate either a weak, moderate, or strong group membership effect on individual ratings and thus provide weak, moderate, or strong evidence for aggregation. In this study, ICC(1) for transformational leadership was .10, revealing a "moderate" effect of group membership on transformational leadership ratings and thus a moderate level of support for aggregation (LeBreton & Senter, 2008).

ICC(2) is likewise estimated from an ANOVA model, but represents an index of the reliability of group means. Put differently, ICC(2) represents the extent to which groups can be reliably distinguished based on the variable of interest, with higher values providing stronger evidence for aggregation. ICC(2) for transformational leadership in this study was .32, which is unfortunately a lower group-mean reliability than is generally recommended. However, there are potentially three explanations for the low ICC(2) value. First, ICC(2) is based in part on group size, with values increasing as group size becomes larger (Bliese, 2000). Because the average group size in my study was only

4.09, it is not all that unusual to see somewhat deflated ICC(2) values in my data. Second, because my study was conducted in a single organization with a strong culture and value system, it is not entirely surprising that groups may not be entirely distinguishable in the organization by transformational leadership. Indeed, Biemann et al. (in press) note that leadership research conducted in a single organization is bound to reveal smaller-than-suggested ICC(2) values simply because ICC(2) is influenced not only by within-group variance but also by between-group variance. Finally, it should be noted that an ICC(2) value of .32 is not entirely different from what is often found in the leadership literature. For example, a study by Chen and Bliese (2002) on leadership and collective efficacy revealed ICC(1) and ICC(2) values of .02 and .43, respectively, on military leadership behavior similar to transformational leadership. Nevertheless, given the strong theoretical rationale for classifying leadership behavior as a group-level construct and evidence indicating high within-group agreement (i.e., high $r_{wg(j)}$ value), Chen and Bliese still aggregated leadership behaviors. I follow this same approach for transformational leadership not just because of the strong theoretical rationale for aggregation, but also due to the high $r_{wg(j)}$ values and the moderate ICC(1), each of which suggest good agreement even if the group means did not exhibit high reliability. As will be seen below, this same rationale is also used to justify the aggregation of passive leadership and abusive supervision.

**Abusive supervision.** Direct reports rated their direct supervisor's abusive supervision behavior at Time 3 using a 6-item scale from Tepper (2000) that represents active-aggressive abusive supervision. The average score of these six items across a given leader's followers represented the overall abusive supervision score assigned to the

leader. Items were measured using a 5-point frequency scale ranging from *not at all* (1) to *frequently, if not always* (5). Sample items include "Ridicules me" and "Tells me my thoughts and feelings are stupid." Coefficient alpha was .77 at the item level and .86 in the aggregated data. $r_{wg(j)}$ was .95 using a uniform distribution and .93 using a skewed distribution, revealing very strong within-group agreement. ICC(1) was .11 and ICC(2) was .33, which, like the other leadership behaviors, provide a moderate amount of support for aggregation.

**Passive leadership.** At Time 3, direct reports rated the extent to which they perceive their leaders as exhibiting passive behavior using eight items from the MLQ-5x. According to Judge and Piccolo (2004), these items cover the MBE-passive and laissez-faire dimensions of the full range model of leadership. The average of the eight items across followers thus represents a given leader's passive leadership score. That said, it should be noted that Bass (1985) views laissez-faire leadership as a distinct leadership behavior from MBE-passive, with laissez-faire being an indicator of "non-leadership" while MBE-passive is an indicator of transactional leadership. Thus, similar to burnout, I ran analyses in which passive leadership was a composite and others in which passive leadership was indicated solely by laissez-faire leadership. At any rate, like the other leadership scales in this study, direct reports rated their direct supervisor's passive leadership on a 5-point frequency scale ranging from *not at all* (1) to *frequently, if not always* (5). Example items include "Avoids getting involved when important issues arise," "Avoids making decisions," and "Delays responding to urgent questions." For the composite scale, coefficient alpha was .82 at the item level and .86 in the aggregated data. Moreover, $r_{wg(j)}$ was .86 using a uniform distribution and .79 using a skewed

distribution, revealing strong within-group agreement. ICC(1) was .18 and ICC(2) was .45, thereby providing a moderate level of support for aggregation. For laissez-faire leadership by itself, coefficient alpha was .78 both at the item level and in the aggregated data; $r_{wg(j)}$ was .85 using a uniform distribution and .78 using a skewed distribution; ICC(1) was .18; and ICC(2) was .47.

**Control variables.** I controlled for a number of variables in my study primarily to demonstrate incremental validity of my model over and above dispositional, experience-related, and demographic factors. Covariates thus include the Big Five personality traits of extraversion and neuroticism, tenure with organization, tenure in current management position, tenure as a manager at any level in any company (i.e., total managerial experience), and various demographics (age, gender, level of education).

First, I controlled for extraversion and neuroticism given that they have been shown to consistently predict burnout, engagement, and leadership behaviors. I did not control for the other three Big Five personality traits both for the sake of parsimony and for the fact that the other Big Five traits are often either weak or inconsistent predictors of the variables in my model. For example, Swider and Zimmerman (2010) meta-analytically demonstrated that extraversion and neuroticism are by far the strongest predictors of burnout. Moreover, Langelaan, Bakker, van Doornen, and Schaufeli (2006) found that extraversion and neuroticism were the strongest predictors of engagement. In terms of leadership behaviors, Judge and Piccolo (2004) found that extraversion and neuroticism were by and large the most consistent and strongest predictors of both transformational and passive leadership behaviors. Taken together, these findings can be explained in large part by the fact that extraversion and neuroticism capture both

approach-avoidance motivational orientations and positive-negative affective tendencies, each of which play a critical role in influencing the affective-motivational states of engagement and burnout as well as the display of leadership behaviors. Thus, to ensure that leadership challenge demands account for variance in engagement, burnout, and leadership behaviors above and beyond that of dispositional tendencies of positive- or negative-valenced emotions and motivation, I controlled for extraversion and neuroticism. These traits were measured using a short form of the International Personality Item Pool (IPIP; Goldberg, 1999) called the Mini-IPIP. This scale was developed and validated by Donnellan, Baird, Lucas, and Oswald (2006). Extraversion and neuroticism were each measured with four items rated on a 5-point Likert scale ranging from *strongly disagree* (1) to *strongly* agree (5). Example items include "I don't talk a lot" (extraversion, reverse-scored) and "I have frequent mood swings" (neuroticism). Coefficient alphas were .76 for extraversion and .59 for neuroticism.[1]

In addition to controlling for personality, I sought to control for experience-related and demographic factors that may impact the variables in my model. For example, it is possible that over the course of leaders' tenure in their supervisory position, they can learn to more adequately meet and balance the various leadership challenge demands they face (Bandura, 1986), which in turn, may increase leadership self-efficacy, reduce burnout, or enhance engagement. Moreover, overall managerial experience (i.e., time spent as a manager at any capacity in any organization) and organizational tenure may have an influence on the degree of self-efficacy, engagement, or burnout that a

[1] Note the low coefficient alpha for neuroticism. Based on subsequent analyses, I discovered that the low alpha value was not the result of a single item or a set of items. Instead, it could potentially be explained by the small number of items used to measure neuroticism.

leader feels in his or her leadership role (Lee & Ashforth, 1993). Therefore, I controlled for these temporal elements of leadership challenge demands to see, once again, if my model holds validity above and beyond the effects of experience-related factors. Specifically, I controlled for (a) tenure in current management position, (b) total managerial experience, and (c) tenure in the organization. Additionally, because research has shown that gender can influence leadership behaviors (Eagly, Johannesen-Schmidt, & van Engen, 2003) and that age and education level can cue people's reactions to job demands (Maslach et al., 2001), I further controlled for age, gender, and level of education in my model. Again, this is done to ensure that my model adds predictive validity after controlling for individual demographic differences. Thus, coupled with the other control variables, it is possible to see if my hypotheses are supported after controlling for relevant demographic, dispositional, and experience-related factors.

Finally, it should be noted that I will also control for two hindrance demands (role ambiguity, role conflict) as well as negative family-to-work spillover in the post-hoc exploratory analyses described in Chapter 4.

## Analytic Strategy

### Confirmatory Factor Analysis

To begin my analysis, I tested the hypothesized measurement model using confirmatory factor analysis (CFA) in LISREL 8.80. I followed Andersen and Gerbing's (1998) suggestion to test the measurement model prior to and separate from the causal model. Testing the validity of the measurement model was important for two reasons. First, it allowed me to assess the magnitude and significance of the links between the theoretical, or latent, constructs in the model and the measures used to assess them.

Second, it provided a test for whether the latent constructs in the model influenced individuals' responses to other measures. Taken together, assessing the measurement model through CFA allowed me to thus test a) whether the measures employed in this study are valid indicators of their respective theoretical constructs in the model, and b) whether the theoretical constructs in the model are empirically distinct from one another.

In CFA, the validity of the measurement model is assessed by testing the overall fit of the measurement model to the data and then estimating the magnitude and significance of parameter values for the latent construct→indicator links and the links between latent constructs. If the indicators of a given latent construct load significantly on the latent construct, then the measures used to assess the latent construct are concluded to be valid indicators of the latent construct. The overall fit of the model to the data can be assessed in a number of ways. Methodologists generally recommend reporting two broad types of indices in studies employing CFA techniques: absolute and incremental/comparative fit indices. Each type of index assesses fit in a different way. I thus chose to report two commonly used absolute fit indices and two commonly used incremental/comparative fit indices in order to provide sufficiently broad evidence for the validity of the hypothesized measurement model.

To begin, so-called "absolute" fit indices compare a hypothesized or theoretically plausible alternative model to a model with perfect fit. It does this by assessing discrepancies between predicted and observed covariance and, in essence, calculating how far the proposed measurement model is from perfect fit. Thus, smaller numbers are desirable when it comes to absolute fit indices. Two of the most commonly reported absolute fit indices in the literature are the root mean squared error of approximation

(RMSEA) and the standardized root mean square residual (SRMR). Although there is disagreement about the use of cut-off values to assess goodness of model fit, RMSEA and SRMR values above .10 are generally considered poor fitting models (Hu & Bentler, 1999).

In contrast to absolute fit indices, incremental/comparative fit indices compare the fit of the suggested model to a baseline model that is the most restricted model (i.e., correlations among variables in the model are equal to zero). Moreover, unlike absolute fit indices, higher values are most desirable when it comes to incremental/comparative fit indices. Two commonly reported incremental/comparative fit indices are the comparative fit index (CFI) and the incremental fit index (IFI). Traditionally, values below .90 have been argued to indicate poor fit (Bentler & Bonett, 1980).

To further ensure that the hypothesized measurement model is valid, I also compared the fit of the hypothesized model to a number of theoretically plausible alternative measurement models. These alternative models are described in Chapter 4. In addition to computing the four fit indices noted above for each alternative measurement model and comparing their fit with that of the hypothesized model, I also conducted a chi-square difference test to more directly compare the fit of the hypothesized measurement model to each alternative model. If the chi-square difference test reveals a significant difference between the fit of the hypothesized model and that of the alternative model, then the hypothesized model provides a superior fit to the data.

**Moderated Path Analysis**

Given the causal structure of my research model, I analyzed my data using moderated path analysis techniques advanced by Edwards and Lambert (2007). The

essence of the Edwards and Lambert method of path analysis is that it combines moderated regression analysis with path analysis while incorporating bootstrapping mediation approaches to test for the significance of path coefficients. The method has received a great deal of attention in the last few years and serves as a robust method of testing moderated causal path models given its emphasis on bootstrapping methods for testing significance of coefficients. It is true that bootstrapping methods have been used previously (Preacher & Hayes, 2004); however, Edwards and Lambert were the first to provide guidance on using bootstrapping techniques to test for moderated mediation, which is at the heart of my research model. In that vein, another key advantage of the Edwards and Lambert (2007) method over other moderated-mediation techniques (e.g., Mueller, Judd, & Yzerbyt, 2005) is its ability to identify exactly where moderation is taking place in the causal path model. Specifically, according to Edwards and Lambert, my research model represents a first-stage moderation model, meaning that LSE is proposed to moderate the relationship between the independent variable (leadership challenge demands) and the mediators (engagement, burnout). In other words, moderation occurs at the first stage of the indirect effect of the independent variable on the dependent variables.

Because I included two mediators and three dependent variables in my model, in reality there were three moderated-mediation models that I tested with the Edwards and Lambert (2007) approach. These include: 1) leadership challenge demands x LSE → engagement → transformational leadership; 2) leadership challenge demands x LSE → burnout → passive leadership; and 3) leadership challenge demands x LSE → burnout → abusive supervision. That said, it should be noted that one potential disadvantage of the

Edwards and Lambert (2007) method, particularly for my research model, is that it does not allow for testing two or more mediators simultaneously. Moreover, the Edwards and Lambert method does not explicitly correct for measurement error as does latent variable modeling. However, while LISREL allows for simultaneously testing multiple mediators, there are numerous problems with testing interaction effects with continuous variables in LISREL. Kenny (2011) thus argues that if there are multiple mediators, they can be tested separately with path analysis if the mediators are not too highly correlated. As will be seen in Chapter 4, this is certainly the case with engagement and burnout.[2]

I adopted a three-step approach to test my hypotheses within the Edwards and Lambert (2007) framework. As noted above, these steps had to be pursued with each of the three moderated mediation models inherent in my research model, meaning that I repeated each step three different times (i.e., for each model). A detailed explanation of my approach to analyzing the data is explained below.

**Step 1: Construct basic mediation models.** In accordance with Edward and Lambert (2007), I began analyzing my hypotheses by constructing basic mediation models. A basic mediation model includes five different effects that are estimated based on corresponding regression equations. The first type of effect is called a *first-stage effect* in that it represents the relationship between the independent variable and the mediating variable, that is, the first "stage" of the path model. For example, H1a and H1b, which propose that leadership challenge demands are positively related to engagement and

[2]However, to verify if the substantive conclusions of my basic mediation models changed significantly by running the mediators and dependent variables in the same model simultaneously, I ran my entire mediated model in LISREL and correlated the error terms between 1) engagement and burnout, and 2) the three leadership behaviors in my model. The substantive conclusions of the basic mediation model did not differ across the two approaches. See Appendix B for the results of this analysis.

burnout, are reflective of first-stage effects. First-stage effects are estimated simply by regressing the mediator variable on the independent variable. After estimating first-stage effects, one can then estimate the *second-stage effect*, which represents the relationship between the mediator variable and the dependent variable after accounting for the effects of the independent variable on the dependent variable. Second-stage effects are thus derived by regressing the dependent variable on the mediator variable after controlling for the independent variable. Hypotheses 3, 4a, and 4b,in which engagement and burnout are proposed to impact the three leadership behaviors included in my model, each represent second-stage effects.

The third effect derived from the Edwards and Lambert (2007) method is the *indirect effect*. It is computed simply by multiplying the first-stage and second-stage effects and is meant to examine the magnitude of mediation taking place in the model. Although mediation hypotheses are not explicitly stated in my dissertation, the pattern of effects I described in the research model suggests a series of mediated relationships between leadership challenge demands, engagement/burnout, and leadership behaviors. In addition, these indirect relationships come into play when testing Hypotheses 5a-5c.

After estimating indirect effects, one can compute the *direct effect*, which represents the relationship between the independent variable and the dependent variable after controlling for the mediating variable. The last type of effect is called a *total effect*, which represents the relationship between the independent variable and the dependent variable without controlling for the mediator. In prior mediation techniques like the Baron and Kenny (1986) method, direct and total effects were used to interpret whether full or partial mediation took place and, in terms of the total effect, whether one should

even test for mediation. However, more recent mediation strategies, including that of Edwards and Lambert (2007), emphasize that researchers should focus on the magnitude of the indirect effects and abandon the use of using total and direct effects for assessing full or partial mediation. In fact, Rucker, Preacher, Tormala, and Hayes (2011) showed via numerous simulations that total and direct effects can be nonsignificant even if indirect, first-stage, and second-stage effects are significant because total and direct effects often have lower statistical power. Thus, while it is suggested that direct and total effects still be reported, most experts on path analysis agree that they are generally the least interpretable and least critical of the other effects computed (Hayes, 2009).

After estimating the magnitude of these various effects, it is necessary to test the statistical significance of each effect. Edwards and Lambert (2007) argue that the significance of any given effect should be assessed by constructing bootstrapped 95% confidence intervals (CIs) around the coefficient. In short, bootstrapping procedures entail generating a sampling distribution of a given effect by repeatedly estimating the coefficients with bootstrap samples. It is generally recommended that 1,000 bootstrap samples be generated, and this can be done using a bootstrapping macro for SPSS provided by Edwards and Lambert. A significant effect then occurs if the 95% CI has lower and upper bounds that exclude zero.[3] However, an important element of the Edwards and Lambert approach is the difference between using bootstrapped confidence intervals based on normal approximation assumptions versus using so-called "bias-corrected" bootstrapped CIs. Specifically, a critical argument of Edwards and Lambert (2007) is that bootstrapped CIs based on assumptions of normality can be used when

[3]In the current study, I round to three decimals when assessing whether a given boostrapped 95% CI includes zero.

evaluating the significance of first-stage, second-stage, and direct effects. This type of bootstrapped CI is similar to Sobel's (1982) bootstrapping approach and is calculated by multiplying the regression coefficient by the standard deviation of the bootstrapped sample mean coefficient and the appropriate *z*-score for the level of significance being tested (e.g., 1.645 for 95% CIs). However, in contrast to Sobel, Edwards and Lambert argue that indirect and total effects have non-normal distributions. Therefore, procedures for constructing bootstrapped confidence intervals that rely on normality assumptions should not be used. Rather, it is suggested that the coefficient estimates used to compute the product of the first- and second-stage effects be rank ordered in order to identify percentile values that can bound the 95% confidence interval. The confidence intervals based on the boostrapped sample are then adjusted for any difference between the product of the first- and second-stage effects from the actual sample and the products from the bootstrap samples. This essentially yields a so-called "bias-corrected" confidence interval from which significance of the indirect and total effects can be tested. The Edwards and Lambert approach thus provides a more rigorous and robust test of indirect effects than does the Sobel method. Moreover, it provides an explicit test of mediation based on bootstrapping method, unlike what is provided in structural equation modeling programs like LISREL.

**Step 2: Incorporate moderator in the mediation models.** A key advantage of the Edwards and Lambert (2007) method over other moderated mediation techniques (e.g., Muller, Judd, &Yzerbyt, 2005) is being able to identify exactly where moderation is taking place within the causal model. As mentioned earlier, my hypothesized model represents a first-stage moderation model in that LSE is proposed as a moderator between

the independent variable (leadership challenge demands) and the mediator variables (engagement, burnout). Two steps are taken to assess whether moderated-mediation is taking place. First, Edwards and Lambert call for running a conventional moderated regression analysis where the mediator variable is regressed on the control variables, independent variables, and the interaction term (Cohen, Cohen, Aiken, & West, 2003). This allows one to detect whether moderation is in fact occurring at the first stage of the model. The significance of the interaction term is then probed using bootstrapped 95% confidence intervals based on normal approximation, and followed up by plotting the pattern of the interaction at high and low levels of the moderator. It should be noted that Edwards and Lambert (2007) acknowledge that this more traditional approach for testing interactions is essentially equivalent to calculating simple first-stage effects at different levels of the moderator (± 1 *SD*) and testing the significance of the differences in these simple effects. However, on the basis of desiring to report results that are more familiar to readers, I followed a traditional multiple regression approach in testing Hypotheses 2a and 2b.

Second, after running a traditional moderated regression analysis, it is then possible to test an integrated moderated-mediation model. Specifically, indirect effects are computed at high and low levels of the moderator by multiplying the first-stage effect at a given level of the moderator (derived in the moderator analysis described above) by the second-stage effect (in a first-stage model, the second-stage effect remains equal across levels of the moderator). This analysis thus generates an indirect effect value (*ab*) for each level of the moderator. Then, because indirect effects have a non-normal distribution, their significance is tested using bias-corrected bootstrapped 95% CIs. From

there, one can see whether one or both indirect effects are significant at either level of the moderator. However, according to Edwards and Lambert, the best test of moderated-mediation involves calculating differences in the indirect effects and, through placing a bias-corrected bootstrapped 95% CI around the difference, evaluating whether the differences between the effects are significant. In this manner, I tested Hypotheses 5a-5c.

**Step 3: Compare hypothesized model to alternative models.** After testing the hypothesized model, Edwards and Lambert (2007) suggest comparing the hypothesized model to a number of plausible alternative models (see also Tepper et al., 2008). For example, it is useful to compare a first-stage model to a second-stage direct effects model to ensure that moderation is in fact occurring at the first stage of the model. Thus, for the current study, I compared the hypothesized first-stage moderation model to an alternative nested second-stage direct effects model. I did this by 1) adding a path representing LSE as a second-stage moderator, and 2) adding a direct path between leadership challenge demands and the dependent variable, based on corresponding regression analyses.

Step 2 was then repeated for the alternative model, and the two models were compared by computing generalized $R^2$values ($R^2_G$) for the hypothesized model and the nested alternative model and comparing them using a *Q*-statistic (Pedhazur, 1982), which is essentially chi-square distributed with *d* degrees of freedom. If the models are not significantly different, then moderation occurs at the first stage. [4] Finally, in addition to

[4]Generalized $R^2$ ($R^2_G$) for the hypothesized model is computed through two regressions. Equation 1 regresses the meditator on the independent variable, moderator, and interaction term. For Equation 2, the dependent variable is regressed on the independent variable and mediator. The $R^2$ values for Equations 1 and 2 are then entered into this equation: $R^2_G = 1 - (1 - R^2_{Eq1}) * (1 - R^2_{Eq2})$. $R^2_G$ for the alternative model is computed similarly, only the moderator and the interactions between a) the mediator and moderator, and b) the independent variable and moderator are added. The formula for computing the *Q*-statistic is: $(1 - R^2_{GHyp}) / (1 - R^2_{GAlt})$. According to Pehauzer (1982), obtaining the *Q*-statistic then allows for computing a *W*-statistic, which is computed as follows: $W = -(N - d) * \log Q$, where *N* and *d* refer, respectively, to the sample size and the number of extra restrictions imposed by the more restricted model.

comparing the hypothesized model to an alternative second-stage direct effects model, I also ran three groups of alternative models that involved testing cross paths from the mediators to the dependent variables. Specifically, I examined whether engagement was associated with passive leadership and abusive supervision and whether engagement served as a mediator between leadership challenge demands and these destructive leadership behaviors. Additionally, I examined whether burnout was negatively associated with transformational leadership and whether it served as a negative-valenced mediator of the relationship between leadership challenge demands and transformational leadership.

Table 1. Demographic Composition of Leader and Direct Report Samples.

| Demographic Characteristic | Leaders (*N* = 174) | | Direct Reports (*N* = 712) | |
|---|---|---|---|---|
| Age | *Between 21-30:* | 2.4% | *Between 21-30:* | 12.7% |
| | *Between 31-40:* | 26.8% | *Between 31-40:* | 31.8% |
| | *Between 41-50:* | 41.1% | *Between 41-50:* | 28.8% |
| | *Between 51-60:* | 26.2% | *Between 51-60:* | 21.4% |
| | *Over 60:* | 3.6% | *Over 60:* | 5.2% |
| Sex | *Male:* | 59.4% | *Male:* | 45.3% |
| | *Female:* | 41.6% | *Female:* | 54.7% |
| Highest educational attainment | *High school:* | 8.0% | *High school:* | 9.1% |
| | *Some college:* | 14.9% | *Some college:* | 29.6% |
| | *Bachelors Degree:* | 48.2% | *Bachelors Degree:* | 47.9% |
| | *Masters Degree:* | 27.4% | *Masters Degree:* | 12.7% |
| | *Beyond Masters:* | 1.2% | *Beyond Masters:* | 0.7% |
| Tenure in organization | *Less than 6 months:* | 1.2% | *Less than 6 months:* | 1.3% |
| | *6 months to 1 year:* | 1.2% | *6 months to 1 year:* | 3.3% |
| | *1-2 years:* | 1.8% | *1-2 years:* | 5.7% |
| | *3-5 years:* | 10.3% | *3-5 years:* | 27.1% |
| | *6-10 years:* | 29.7% | *6-10 years:* | 20.4% |
| | *Over 10 years:* | 55.8% | *Over 10 years:* | 42.2% |
| Total managerial experience | *Less than 6 months:* | 1.8% | n/a | |
| | *6 months to 1 year:* | 2.4% | | |
| | *1-2 years:* | 12.0% | | |
| | *3-5 years:* | 14.5% | | |
| | *6-10 years:* | 18.1% | | |
| | *Over 10 years:* | 51.2% | | |
| Tenure in current management position | *Less than 6 months:* | 7.8% | n/a | |
| | *6 months to 1 year:* | 10.8% | | |
| | *1-2 years:* | 1.8% | | |
| | *3-5 years:* | 10.3% | | |
| | *6-10 years:* | 29.7% | | |
| | *Over 10 years:* | 55.8% | | |
| Tenure with current supervisor | n/a | | *Less than 6 months:* | 7.8% |
| | | | *6 months to 1 year:* | 25.1% |
| | | | *1-2 years:* | 31.3% |
| | | | *3-5 years:* | 27.1% |
| | | | *6-10 years:* | 6.5% |
| | | | *Over 10 years:* | 2.2% |

# CHAPTER IV

# RESULTS

Having described in the previous chapter the sample, procedures, methods, and analytic strategies I used to test my research model, in this chapter I report the results of my study. I first give a brief overview of some notable descriptive statistics and correlations. Second, I report the results of the CFA in which I tested the validity of my proposed measurement model. Third, I report the results of the causal model analysis in which I tested my hypotheses. Finally, I test a few alternative causal models and report the results of some exploratory post-hoc analyses.

## Descriptive Statistics and Correlations

Table 2 reports the descriptive statistics and intercorrelations for the study variables. In this section, I will very briefly note just a couple of findings in Table 2 that may be of interest. First, it should be noted that there is a very low base rate and a small amount of variance in abusive supervision ($M$ = 1.13, $SD$ = .27). As can be seen in Table 2, the low base rate and low variance severely reduced the number of significant relationships that could be detected between abusive supervision and study variables. There was also a somewhat low base rate for passive leadership, although its variance is greater ($M$ = 1.66, $SD$ = .48) and is more aligned with the degree of variance witnessed in transformational leadership ($M$ = 3.78, $SD$ = .51) and other study variables.

Second, please note that the composite factors of engagement and burnout are only moderately correlated ($r$ = -.36), supporting the notion that engagement and burnout are related yet distinct constructs (Crawford et al., 2010). The intercorrelations between leadership behaviors were also moderate in magnitude for the most part. For example,

transformational leadership was correlated $r$ = -.38 with abusive supervision, while passive leadership was correlated $r$ = .45 with abusive supervision. Although the correlation between transformational leadership and passive leadership was fairly strong ($r$ = -.65), it is not necessarily strong enough to suggest that passive is simply the polar opposite of transformational leadership. However, to further test assumptions of discriminant validity of the leadership constructs in my model, in the next section I test the fit of the proposed measurement model to the data and compare the hypothesized measurement model to a number of alternative models.

## Measurement Model

### Fit of Hypothesized Measurement Model

As described in Chapter 3, prior to testing my hypotheses I conducted a CFA to test the overall fit of the hypothesized measurement model to the data. The hypothesized model includes seven latent variables: leadership challenge demands, LSE, engagement, burnout, transformational leadership, laissez-faire leadership, and abusive supervision. To avoid exceeding the recommended ratio of estimated parameters to sample size, I formed parcels when creating the indicators of the latent variables (Bentler & Chou, 1987; Coffman & MacCallum, 2005; Williams, 2008). Whenever possible, these parcels were formed based on theory and prior research findings. For example, in terms of the leadership challenge demands construct, I formed items into six parcels, each one representing a dimension of leadership challenge demands discussed in Chapter 2 and identified in prior research on challenging job assignments (DeRue & Wellman, 2009; Dragoni et al., 2009; McCauley et al., 1999). These dimensions include creating change, high levels of responsibility, managing boundaries, and managing surface-level diversity.

Furthermore, as noted in Chapter 2, I added two additional dimensions (managing deep-level diversity, developing followers) to the leadership challenge demands construct given my theory as well as the fact that their respective items grouped together appropriately.

I followed a similar parceling approach for engagement, burnout, transformational leadership, and passive leadership. Specifically, I formed engagement items into three parcels representing vigor, dedication, and absorption; burnout into two parcels representing emotional exhaustion and cynicism; transformational leadership into five parcels representing idealized influence-attribution, idealized influence-behavior, inspirational motivation, intellectual stimulation, and individualized consideration; and passive leadership into two parcels representing MBE-passive and laissez-faire leadership. In terms of abusive supervision and leadership self-efficacy—for which no clear dimensions exist—I formed items into three random parcels per latent variable (Landis, Beal, & Tesluk, 2000).

The results of the CFA are shown in Table 3. Results indicate that the hypothesized model provided an acceptable fit to the data ($\chi^2$ (231) = 547.91, $p < .01$; RMSEA = .09; SRMR = .08; CFI = .91; IFI = .91). Moreover, it should be noted that the two additional dimensions of leadership challenge demands proposed in my study (developing followers, managing deep-level diversity) loaded significantly onto the second-order leadership challenge demands factor. In fact, as depicted in Figure 1, the factor loadings for these two dimensions were commensurate with the factor loadings of the other four dimensions identified in previous research. This not only lends support for viewing leadership challenge demands as a composite of the scores across the different

demands inherent in the construct, but also supports the addition of managing deep-level diversity and developing followers as additional dimensions of the construct.

**Comparison of Alternative Measurement Models**

To further confirm the validity of the measurement model, I compared the fit of the hypothesized model to six other theoretically plausible measurement models. The first alternative model treated the six dimensions of leadership challenge demands as distinct factors. This alternative model harks back to the discussion in Chapter 3 about these dimensions traditionally being assumed as indicators of a higher-order factor. Although this assumption has received empirical support in the literature, I sought to confirm these findings in my own data. The second alternative model combined LSE and burnout into a single factor given that efficacy is sometimes modeled as an indicator of burnout (Maslach et al., 2001). The third alternative model combined engagement and burnout into a single factor given some researchers' doubts that engagement and burnout represent two distinct constructs (Maslach & Leiter, 2008). In the fourth alternative model, I combined transformational leadership and passive leadership into a single factor given that transformational and passive leadership are sometimes suggested to represent opposite ends of the same continuum (Judge & Piccolo, 2004). For the same reason, I combined transformational leadership and abusive supervision into a single factor for the fifth alternative model. Finally, in the sixth alternative model, I tested whether passive leadership and abusive supervision are better suited as indicators of a single "destructive" leadership construct or whether they are in fact distinct constructs (Einarsen et al., 2007).

Results in Table 3 indicate that compared to any of the alternative models, the hypothesized seven-factor measurement model fit the data best. Specifically, the

hypothesized model was the only measurement model which consistently met generally accepted fit standards. Furthermore, and perhaps more convincingly, the chi-square difference tests revealed that the fit of the seven-factor model was significantly better than the fit of each alternative model. Thus, I retained the hypothesized seven-factor measurement model and proceeded with the causal model analysis.

## Causal Model

Prior to describing the results of my causal model tests, I should note that in Chapter 3, I discussed the fact that I modeled burnout and passive leadership as composite measures. Specifically, burnout was indicated by feelings of emotional exhaustion and cynicism, whereas passive leadership was indicated by MBE-passive and laissez-faire leadership behaviors. Although the measurement model indicates that these indicators load significantly on to their respective latent constructs, I found that including these variables as composites in my causal analysis produced null results. In other words, whereas I thought previous to running the analyses that constructing burnout and passive leadership as composites would strengthen the relationships in my model, I found that it actually weakened them substantially. These results and, more importantly, along with the following theoretical justifications, prompted me to run further analyses with exhaustion as the sole indicator of burnout, and laissez-faire leadership as the sole indicator of passive leadership.

In terms of justifying this measurement approach theoretically, it should first be recalled that my theory about the effects of leadership challenge demands on burnout revolves around conservation of resources theory, which deals almost exclusively with the exhaustion component of burnout. Second, researchers are increasingly modeling

exhaustion as a construct in and of itself because research has shown that feelings of exhaustion are generally experienced previous to and separate from feelings of cynicism (Swider & Zimmerman, 2010). Moreover, exhaustion has long been conceptualized as the core component of burnout (Maslach et al., 2001). Third, the stress-coping frameworks used to justify the proposed relationship between burnout and passive leadership largely revolved around withdrawal and avoidance of leadership roles, which is more indicative of laissez-faire leadership than MBE-passive, which is concerned more with slow response time from managers rather than actual withdrawal and avoidance. Finally, Bass's (1985) full range model of leadership categorizes laissez-faire leadership as separate from MBE-passive, and up to this point only Bono and Judge (2004) have modeled MBE-passive and laissez-faire leadership as a composite measure—and this was done in a meta-analysis rather than in a primary study. For these reasons, the results I report below are based on an updated measurement model in which exhaustion was the sole indicator of burnout and laissez-faire leadership was the sole indicator of passive leadership. The CFA on this updated model demonstrated acceptable fit of the model to the data ($\chi^2$ (292) = 596.31; RMSEA = .08; SRMR = .08; CFI = .92; IFI = .92) and was superior to any theoretically plausible alternative models.[5] Specific results of this updated CFA are provided in Table 4. Results of the causal model analysis in which burnout and passive leadership were modeled as composites are available upon request.

**Tests of Hypotheses**

As described in Chapter 3, I began testing my hypotheses by constructing three basic mediation models using the Edwards and Lambert (2007) method. The first

[5] Please note that I formed the nine exhaustion items into three random parcel indicators of burnout. The four laissez-faire items were modeled as indicators of passive leadership rather than formed into parcels.

mediation path I examined was leadership challenge demands → engagement → transformational leadership. In constructing this mediation model, I was able to test Hypothesis 1a, which predicts a significant positive relationship between leadership challenge demands and engagement, and Hypothesis 3, which predicts a significant positive relationship between engagement and transformational leadership. I thus ran the regressions and bootstrap samples as described in Chapter 3 and in accordance with the Edwards and Lambert method to derive first-stage and second stage-effects and to test for the significance of these effects. It should be noted that variables were mean-centered prior to the analyses and that the regressions were run with unstandardized coefficients as suggested by Edwards and Lambert (2007) and other causal modeling methodologists (Preacher & Hayes, 2004; Preacher, Rucker, & Hayes, 2007).[6] Results of this analysis, shown in Table 5, provide support for Hypothesis 1a in that leadership challenge demands were significantly related to higher levels of engagement among leaders (*B* = .194, 95% CI: .043, .344). Table 4 also demonstrates support for Hypothesis 3 in that leaders who felt more highly engaged at work were perceived by subordinates as higher on transformational leadership (*B* = .162, 95% CI: .040, .285). It should also be noted that, based on bootstrapping techniques, engagement was found to mediate the relationship between leadership challenge demands and transformational leadership (*ab*= .031, 95% CI: .002, .068).

[6] One problem with using standardized variables in the causal model analysis is that the bootstrap SPSS macros provided by Edwards and Lambert produce only unstandardized coefficients. Thus, even if one was to use standardized variables as input for the bootstrap macros, the bootstrap 95% CI will not correspond to a bootstrap 95% CI for the product of the standardized paths simply because the macros perform on the basis of unstandardized coefficients. In other words, the sampling distribution for the standardized indirect effect will be incorrect, thereby fouling up the 95% CIs. I found this to be true in my sample. In fact, when I ran my analyses with standardized variables as input, the indirect effect coefficients did not even fall inside the bootstrapped 95% CIs. Hence, only unstandardized coefficients are reported in my analyses.

The second basic mediation model I constructed was leadership challenge demands → burnout → passive leadership. This allowed me to test Hypothesis 1b, which predicts a significant positive relationship between leadership challenge demands and burnout (i.e., first-stage effect), and Hypothesis 4b, which predicts a significant positive relationship between burnout and passive leadership (second-stage effect). Results of this analysis are displayed in Table 6. In support of Hypothesis 1b, leadership challenge demands were positively related to burnout among leaders (*B* = .260, 95% CI: .029, .491). In turn, burnout was found to predict stronger subordinate perceptions of passive leadership (*B* = .085, 95% CI: .017, .153), thereby supporting Hypothesis 4a. Table 5 also shows that burnout mediated the relationship between leadership challenge demands and passive leadership (*ab*= .022, 95% CI: .010, .080).

The third basic mediation model I constructed was leadership challenge demands → burnout → abusive supervision. The first-stage of this model was tested in conjunction with the second basic mediation model previously constructed (described above). However, the third basic mediation model allowed me to test Hypothesis 4a, which predicts a significant positive relationship between manager burnout and abusive supervision (i.e., second-stage effect). Results in Table 7 show that this hypothesis was not supported (*B* = .010, 95% CI: -.025, .045). Furthermore, burnout did not mediate the relationship between leadership challenge demands and abusive supervision (*ab*= .002, 95% CI: .000, .029). As noted earlier, these non-findings could potentially due to the low base rate and small variance in abusive supervision within the organization where the research was conducted.

After constructing these three basic mediation models, I examined Hypotheses 2a and 2b, which predict, respectively, that LSE moderates the relationships between leadership challenge demands and burnout and engagement. In path analysis terms, these hypotheses represent first-stage moderation effects. As noted earlier, Edwards and Lambert (2007) argue that first-stage interactions can be tested using traditional multiple regression approach in which the dependent variable is regressed on the independent variables and the interaction term (e.g., Cohen et al., 2003). I thus constructed two multiple regression models. These models are shown in Table 8. In the first model, engagement served as the dependent variable and was regressed on the eight control variables and the two independent variables (leadership challenge demands, LSE). An interaction term between leadership challenge demands and LSE was then added at the end of the regression equation. This same approach was repeated in the second model in which burnout was modeled as the dependent variable. Results in Table 7 demonstrate that there was a significant interaction between leadership challenge demands and LSE when it comes to predicting burnout (*B* = -.473, 95% CI: -.903, -.044), but not in terms of predicting engagement (*B* = -.090, 95% CI: -.445, .265). The pattern of the significant interaction between leadership challenge demands, LSE, and burnout is plotted in Figure 2 at two levels of LSE (+1 *SD* and -1 *SD*; Cohen et al., 2003). As predicted, leaders low in LSE reacted to leadership challenge demands with significantly high levels of burnout (*B* = .553, 95% CI: .025, .727), whereas leaders high in LSE responded to leadership challenge demands with no significant degree of burnout (*B* = .107, 95% CI: -.145, .428). Thus, in support of Hypothesis 2a, the effects of leadership challenge demands on

manager burnout were found to be stronger for low-LSE leaders. Hypothesis 2b was not supported, however.

Finally, I tested Hypotheses 5a-5c, where LSE was predicted to moderate the three basic mediation models described above. Specifically, the leadership challenge demands → engagement → transformational leadership relationship was predicted to be stronger for high-LSE leaders whereas the leadership challenge demands → burnout → passive leadership and leadership challenge demands → burnout → abusive supervision relationships were predicted to be stronger for low-LSE leaders. In accordance with Edwards and Lambert, the basic mediation paths and moderated regression analyses constructed previously (Tables 4-7) were used to construct conditional indirect effect models and examine whether moderated mediation is taking place. Indirect effects and their associated bias-corrected bootstrapped 95% CIs were then computed at two levels of LSE (± 1 *SD*). Results of this analysis are displayed in Table 9. Hypothesis 5a and 5b did not receive support. However, Hypothesis 5c did receive support. Specifically, whereas the indirect effect of leadership challenge demands on passive leadership (through burnout) was significant at low levels of LSE (*ab*= .047, 95% CI: .009, .132), it was not significant at high levels of LSE (*ab*= -.002, 95% CI: -.000, .054). Moreover, the difference between the indirect effect at high and low levels of LSE was significant, with the indirect effect of leadership challenge demands on passive leadership (through burnout) being stronger for leaders low in LSE (Δ*ab*= -.038, 95% CI: -.002, -.117).

**Alternative Causal Models**

To further assess the validity of my research model, I tested a number of alternative models aimed at a) verifying that LSE serves as a first-stage moderator only,

and b) exploring whether significant cross paths exist from burnout and engagement to the three leadership behaviors in my model.

To begin, as indicated in Chapter 3, an advantage of the Edwards and Lambert (2007) method of moderated path analysis is its ability to probe the location of the model at which moderation is occurring. In the case of my research model, LSE serves as a first-stage moderator. However, to verify that moderation does not take place at the second stage of the model, it is necessary to construct an alternative nested model in which LSE is added as a second-stage moderator. To do that, I used the regression equations shown in Table 7 and then ran three additional regressions in which each leadership behavior was separately regressed on the following variables: leadership challenge demands, LSE, engagement (or burnout), leadership challenge demands x LSE, and engagement (or burnout) x LSE. Generalized $R^2$ ($R^2_G$) values were then computed for each regression equation. These $R^2_G$ values were then compared with the $R^2_G$values associated with the hypothesized model's regressions equations using *Q*-scores (Pedhauzer, 1982). Please note that Chapter 3 (footnote 4) explains how the *Q*-score is calculated. From the *Q*-score, the *W*-statistic can be computed to test whether the alternative second-stage model has greater validity than the hypothesized model. Again, Chapter 3 (footnote 4) provides information about how the *W*-statistic is computed. If the *W*-statistic is significant, then the alternative model holds greater validity. Otherwise, the hypothesized model should be retained. Results of this analysis are shown in Table 10. In all cases, the hypothesized model was superior to any of the alternative second-stage direct effect models as indicated by the non-significant *W*-statistic corresponding to each

model comparison. Thus, it appears that moderation is taking place at the first stage of the causal model as hypothesized *a priori*.

I also ran three alternative models in which I tested for cross paths between the mediators and the independent variables. The structure and findings of these alternative models are described in Table 11. For Alternative Model 1, I constructed a basic mediation model in which engagement, rather than burnout, served as the mediator between leadership challenge demands and passive leadership. Results revealed that engagement was not significantly related to passive leadership in terms of a second-stage effect (*B* = -.047, 95% CI: -.170, .051) nor was there a significant indirect effect of leadership challenge demands on passive leadership through lower engagement (*ab* = -.008, 95% CI: -.045, .002). In addition, when I constructed a conditional indirect effects model based on this alternative basic mediation model, I found no evidence for significant conditional indirect effects of leadership challenge demands on passive leadership (through engagement) at high and low levels of LSE. I next constructed a similar basic mediation model to that of Alternative Model 1 in that engagement, rather than burnout, was modeled as the mediator between leadership challenge demands and abusive supervision. This model was labeled Alternative Model 2. In testing this model, I similarly found no evidence for engagement having second-stage effects on abusive supervision (*B* = -.019, 95% CI: -.091, .013) nor was there a significant indirect effect of leadership challenge demands on abusive supervision through engagement (*ab* = -.003, 95% CI: -.022, .000). As with Alternative Model 1, no conditional indirect effects were detected either.

Alternative Model 3 consisted of a basic mediation model in which burnout acted as mediator between leadership challenge demands and transformational leadership. Results demonstrated no significant second-stage effect of burnout on transformational leadership (*B* = -.081, 95% CI: -.162, .001). However, there was a significant, negative indirect effect of leadership challenge demands on transformational leadership through burnout, meaning that leadership challenge demands was related to low transformational leadership through high burnout (*ab* = -.027, 95% CI: -.082, -.001). No conditional indirect effect of leadership challenge demands on transformational leadership (through burnout) was detected, however. Moreover, because there was a significant direct effect of leadership challenge demands on transformational leadership when burnout was modeled as a mediator (*B* = .189, 95% CI: .026, .352), it is apparent that the significant indirect effect is indicative of partial mediation. Thus, perhaps not surprisingly, it seems that leaders experiencing burnout in response to leadership challenge demands engaged not only in passive leadership, but also less transformational leadership in part through high burnout.

## Post-Hoc Exploratory Analyses

By way of interest, I conducted a few post-hoc exploratory analyses to investigate the following issues: a) whether leadership challenge demands have curvilinear effects on engagement and burnout; b) how leadership challenge demands impact the variables in my research model after controlling for work-related hindrance demands (role conflict, role ambiguity); and c) how leadership challenge demands affect study variables after controlling for non-work, family-related stressors. Each of these analyses is explained below. To present a parsimonious set of results, I only report effects sizes and

confidence intervals for those effects which are statistically significant (i.e., bootstrapped 95% CI does not include zero).

**Curvilinear Effects of Leadership Challenge Demands**

DeRue and Wellman (2009) found evidence for a curvilinear effect of developmental job components on managerial learning and competency development. More specifically, they found that developmental challenge had a pattern of diminishing return on managerial learning, but that access to feedback offset these diminishing returns. In addition, an oft-quoted principle in organizational behavior and organizational psychology textbooks is that challenging work impacts individuals in a curvilinear pattern such that too little challenge or too much challenge decreases motivation and performance (e.g., Bauer & Erdogan, 2009; Quick, Quick, Nelson, & Hurrell, 1997).

In light of these findings, I decided to examine in my data whether the impact of leadership challenge demands on leadership behaviors through engagement or burnout operates in a curvilinear fashion. To do so, I added a squared term for leadership challenge demands in the regressions equations used to construct the basic mediation models described above. I then ran the Edwards and Lambert (2007) bootstrap macro with the squared term while incorporating the same control variables from my analysis of the hypothesized causal model. Results showed that there were absolutely no significant first-stage, direct, indirect, or total effects of the squared term. It thus appears that the impact of leadership challenge demands on the variables in my model is best conceptualized and operationalized as linear in nature, with the exception being that of the interaction between leadership challenge demands and LSE in predicting burnout.

**Role of Hindrance Demands**

A potentially interesting question stemming from my study of leadership challenge demands is how hindrance demands impact the variables in my model. As described in Chapter 2, job demands are best conceptualized as multidimensional, with the challenge/hindrance demand distinction being the most common and most current way of conceptualizing job demands. As a review, please note that I have chosen to focus on challenge demands for two primary reasons. First, challenge demands exhibit more nuanced relationships in that they have competing (i.e., both positive and negative) effects on engagement, burnout, and work behaviors (Crawford et al., 2010; LePine et al., 2005; Podsakoff et al., 2007). On the other hand, hindrance demands have been shown to have universally negative effects. Thus, discovering what accounts for the dual effects of challenge demands represents a significant contribution to the literature. Second, work by McCauley et al. (1994, 1999) has succeeded in identifying challenge demands specific to leaders, thereby providing a useful framework for examining how leader-level challenge demands influence leader behavior. Conversely, leader-specific hindrance demands have not been identified or operationalized in a way that makes it practical to examine their effects on leadership behavior. Nevertheless, for this study, it seems prudent to at least examine how certain hindrance demands—albeit hindrance demands that are common to managers and non-managers alike—play a role in my model. Thus, given the moderate relationship between hindrance and challenge demands ($\rho = .23$; Crawford et al., 2003), I ran analyses in which I controlled for hindrance demands. I then observed how leadership challenge demands impact the variables in my model after

controlling for hindrance demands and assessed the effects of hindrance demands on my study variables.

In terms of identifying hindrance demands to examine in this study in a post-hoc fashion, I chose to focus on two of the most commonly studied hindrance demands in the literature: role conflict and role ambiguity. Role conflict is defined as facing contradictory and competing demands at work, whereas role ambiguity is defined as facing vagueness in relation to job responsibilities and rewards. They were measured using a 14-item scale by Rizzo et al. (1970). Example items include "I work under incompatible guidelines and policies" (role conflict) and "I know what my responsibilities are" (role ambiguity, reverse-scored). I ran models in which leadership challenge demands and the two hindrance demands were modeled simultaneously[7], which allowed me to examine how hindrance demands and leadership challenge demands impact the variables in my model while controlling for each other's effects. I used the same set of control variables as those used in the hypothesized causal model analyses.

When role conflict and role ambiguity were both modeled as covariates, I found that leadership challenge demands still had significant first-stage effects on engagement (*B* = .154, 95% CI: .004, .304) and that engagement still positively predicted transformational leadership (*B* = .189, .067, .312). However, despite there being significant first and second-stage effects, the indirect effect of leadership challenge demands on transformational leadership through engagement was nonsignificant. Moreover, as was the case previously, no significant conditional indirect effects of

[7] Please note that I treated role ambiguity and role conflict as separate latent variables after running a CFA in which role ambiguity and role conflict were added to the existent measurement model. Specifically, I found that the model in which they were treated as separate latent variables fit the data better than a model in which they were treated as one factor ($\Delta\chi^2$ (8) = 317.18, $p < .01$). In addition, the composite reliability of role conflict and role ambiguity was .59, further supporting their treatment as separate latent variables.

leadership challenge demands on transformational leadership were found. In terms of how leadership challenge demands impact burnout, passive leadership, and abusive supervision after controlling for hindrance demands, most of the results I had detected previously turned non-significant. The exception is that the interaction between leadership challenge and LSE in terms of predicting burnout still remained significant (*B* = -.620, 95% CI: -1.129, -.112). Specifically, leadership challenge demands resulted in higher burnout for low-LSE leaders (*B* = .423) and less burnout for high-LSE leaders (*B* = -.161). Otherwise, second-stage, indirect and conditional indirect effects both in terms of passive leadership and abusive supervision were nonsignificant when controlling for both role ambiguity and role conflict.

It may seem surprising that many of the previous results I obtained with leadership challenge demands were nullified by including hindrance demands as control variables. However, I believe there is a key reason why this occurred. Specifically, it is possible that controlling for role conflict may have in fact had the unintended consequence of partialing out meaningful variance in leadership challenge demands. For example, the fact that the leadership challenge demands construct entails facing demands that come from bosses, peers, subordinates, and third parties, role conflict may be an inevitable element of leadership challenge demands. In fact, the correlation between leadership challenge demands and role conflict in my data was *r* = .43. Thus, controlling for role conflict may be partialing out meaningful variance in leadership challenge demands. Interestingly, role ambiguity itself does not seem to be suppressing relationships in my model, however. Indeed, when I control only for role ambiguity, all the effects found previously in my hypothesized model remain the same, including a

significant first-stage effect of leadership challenge demands on burnout (*B* = .288, 95% CI: .057, .519); second-stage effect of burnout on passive leadership (*B* = .076, 95% CI: .008, .144); indirect effect of leadership challenge demands on passive leadership through burnout (*ab* = .022, 95% CI: .010, .080); and conditional indirect effects in the hypothesized direction (Δ*ab* = -.039, 95% CI: -.132, -.005).

Finally, it should be noted that role ambiguity and role conflict had relationships with engagement and burnout as would normally be predicted by the challenge-hindrance demands framework. In particular, role ambiguity had negative effects on engagement (*B* = -.191, 95% CI: -.307, -.076) and positive effects on burnout (*B* = .172, 95% CI: .031, .313), while role conflict had positive effects on just burnout (*B* = .327, 95% CI: .190, .464). Interestingly, however, there were no indirect effects of either of these so-called hindrance demands on transformational leadership, passive leadership, or abusive supervision.

**Role of Negative Family-to-Work Spillover**

Although my study is concerned with challenge demands for leaders in a work context, demands from non-work arenas may also impact the variables in my model. Of course, an inherent disadvantage of studying non-work demands and their impact on engagement, burnout, and leadership behavior is that unlike leadership challenge demands, there is no clear taxonomy of non-work demands. Nevertheless, it was suggested that I try controlling for non-work stressful demands to see whether my model still holds. However, given the lack of a taxonomy and validated scale of non-work demands, I was only able to measure non-work *stress* rather than the demands that may cause that stress. Specifically, non-work stress was operationalized as negative family-

to-work spillover—i.e, the extent to which family and personal matters disrupt activities at work—using a 4-item Likert scale from Gryzwacz and Marks (2000). Example items include "Personal or family worries and problems distract me when I am at work" and "Stress at home makes me irritable at work." I controlled for the same variables that were used in the hypothesized causal model analysis.

When I examined my hypothesized model after controlling for negative family-to-work spillover, my conclusions regarding the effects of leadership challenge demands on transformational leadership through engagement remained the same. Specifically, there was still a significant first-stage effect of leadership challenge demands on engagement, (*B* = .207, 95% CI: .057, .357); a significant second-stage effect of engagement on transformational leadership (*B* = .150, 95% CI: .028, .273); and a significant indirect effect of leadership challenge demands on transformational leadership through engagement (*ab* = .031, 95% CI: .001, .065). However, in terms of the effects of leadership challenge demands on passive leadership (through burnout) after controlling for negative family-to-work spillover, results did change somewhat. Although there was still a significant first-stage effect of leadership challenge demands on burnout (*B* = .224, 95% CI: .074, .374) and a significant indirect effect of leadership challenge demands on passive leadership through burnout (*ab* = .014, 95% CI: .002, .042), the second-stage effect of burnout on passive leadership turned non-significant, as did the conditional indirect effect of leadership challenge demands on passive leadership across levels of LSE. Finally, in terms of how leadership challenge demands impact abusive supervision through burnout, results remained the same when controlling for negative family-to-work

spillover; that is, there were still no significant second-stage, direct, indirect, or conditional indirect effects.

I believe the reason why my results changed when it came to controlling for negative family-to-work spillover and examining burnout as a mediator could potentially be due to the moderate relationship between negative family-to-work spillover and burnout ($r$ = .36). This moderate relationship may be due at least in part to the way that negative family-to-work spillover is measured. For example, the items of this scale gauge how much stress the person feels at work due to family or personal matters. In this sense, the negative family-to-work spillover measure still assesses stress at work; it simply pinpoints the *source* of work stress as home and family rather than work. Thus, this construct overlap between negative family-to-work spillover and burnout could perhaps be resulting in some degree of multicollinearity, which in turn may be harming my results.[8] On the other hand, there is also a distinct possibility that non-work factors simply account for more variance in employee motivation and behaviors—including for leaders—than is generally considered (Rothbard & Wilk, 2011), particularly when it comes to extreme affective-motivational states like burnout. Interestingly, organizational behavior research tends to study how work demands and events influence home and family life, not the other way around. However, perhaps the impact of non-work stressors on employee motivation and performance needs to be considered to a greater degree than is currently done.

[8] Please note that there is a there is a smaller relationship between negative family-to-work spillover and engagement ($r$ = -.21), which may be the reason why relationships between leadership challenge demands, engagement, and transformational leadership remain significant even after controlling for negative family-to-work spillover.

Table 2. Descriptive Statistics and Intercorrelations between Study Variables.

| Variable | *M* | *SD* | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Creating change | 1.91 | .45 | **.74** | | | | | | | | | | | |
| 2. High levels of responsibility | 2.78 | .69 | .48 | **.78** | | | | | | | | | | |
| 3. Managing boundaries | 2.79 | .80 | .39 | .60 | **.85** | | | | | | | | | |
| 4. Managing surface-level diversity | 2.11 | .77 | .27 | .39 | .38 | **.87** | | | | | | | | |
| 5. Managing deep-level diversity | 3.24 | .74 | .28 | .28 | .18 | .43 | **.80** | | | | | | | |
| 6. Developing followers | 3.40 | .64 | .18 | .32 | .34 | .35 | .70 | **.77** | | | | | | |
| 7. Leadership challenge demands (composite) | 2.71 | .47 | .57 | .74 | .72 | .70 | .70 | .70 | **.92** | | | | | |
| 8. Leadership self-efficacy | 4.12 | .47 | -.12 | .11 | .16 | .09 | .15 | .26 | .18 | **.89** | | | | |
| 9. Vigor | 3.97 | .51 | -.09 | .20 | .23 | .07 | -.05 | .17 | .14 | .38 | **.80** | | | |
| 10. Dedication | 4.11 | .60 | -.06 | .26 | .25 | .06 | -.03 | .14 | .16 | .33 | .81 | **.85** | | |
| 11. Absorption | 3.72 | .59 | .13 | .30 | .26 | .08 | .05 | .16 | .23 | .24 | .65 | .63 | **.78** | |
| 12. Engagement (composite) | 3.94 | .51 | -.01 | .29 | .28 | .08 | -.01 | .18 | .20 | .35 | .91 | .91 | .86 | **.91** |

*Note.* N = 148-172. Coefficient alphas are on the diagonal in bold. Correlations equal to or greater than .14 are significant at $p < .05$ and have 95% confidence intervals that exclude zero.

Table 2 - Continued

| Variable | *M* | *SD* | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 13. Emotional exhaustion | 2.45 | .79 | .29 | .24 | .03 | -.01 | .14 | -.04 | .14 | -.23 | -.44 | -.36 | -.07 | -.32 |
| 14. Cynicism | 1.53 | .56 | .19 | .06 | -.12 | -.04 | .02 | -.15 | -.03 | -.28 | -.40 | -.33 | -.13 | -.32 |
| 15. Burnout (composite) | 1.99 | .60 | .28 | .19 | -.04 | -.02 | .10 | -.09 | .08 | -.28 | -.47 | -.39 | -.11 | -.36 |
| 16. Idealized influence-attribution | 3.90 | .61 | -.06 | .09 | .16 | .07 | .08 | .15 | .15 | .16 | .12 | .09 | .11 | .12 |
| 17. Idealized influence-behavior | 3.69 | .51 | .08 | .14 | .17 | .12 | .10 | .23 | .21 | .18 | .22 | .21 | .18 | .23 |
| 18. Inspirational motivation | 3.91 | .55 | .03 | .10 | .16 | .09 | .15 | .23 | .19 | .25 | .24 | .22 | .22 | .25 |
| 19. Intellectual stimulation | 3.68 | .56 | -.01 | .07 | .15 | .11 | .11 | .13 | .16 | .11 | .13 | .10 | .13 | .14 |
| 20. Individualized consideration | 3.71 | .61 | -.08 | .07 | .11 | .09 | .16 | .18 | .15 | .25 | .10 | .10 | .20 | .15 |
| 21. Transformational leadership (composite) | 3.78 | .51 | -.01 | .11 | .17 | .10 | .14 | .21 | .19 | .22 | .18 | .16 | .19 | .19 |
| 22. Management-by-exception-passive | 1.81 | .58 | .11 | -.02 | -.02 | -.04 | .04 | -.07 | -.02 | -.00 | -.11 | -.05 | -.09 | -.09 |
| 23. Laissez-faire | 1.51 | .46 | .15 | .03 | -.05 | .01 | .13 | -.01 | .04 | -.02 | -.04 | .06 | -.04 | -.00 |
| 24. Passive leadership (composite) | 1.66 | .48 | .14 | .00 | -.03 | -.02 | .08 | -.05 | .01 | -.01 | -.09 | .00 | -.07 | -.06 |
| 25. Abusive supervision | 1.13 | .27 | .11 | .05 | -.01 | -.01 | .03 | .00 | .03 | .01 | .02 | -.03 | -.02 | -.01 |

*Note.* N = 148-172. Coefficient alphas are on the diagonal in bold. Correlations equal to or greater than .14 are significant at $p < .05$ and have 95% confidence intervals that exclude zero.

Table 2 - Continued

| Variable | *M* | *SD* | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 26. Extraversion | 3.33 | .75 | .01 | -.00 | .13 | -.07 | .14 | .16 | .09 | .29 | .24 | .27 | .27 | .29 |
| 27. Neuroticism | 2.13 | .64 | .11 | .12 | -.08 | -.10 | .02 | -.14 | -.04 | -.25 | -.38 | -.28 | -.14 | -.29 |
| 28. Tenure with organization | See Table 1 | | -.09 | .19 | -.06 | .18 | .05 | .00 | .07 | .07 | -.05 | .03 | -.06 | -.03 |
| 29. Total managerial experience | See Table 1 | | -.03 | .17 | .27 | .17 | -.08 | .03 | .14 | .18 | .14 | .14 | .04 | .12 |
| 30. Tenure in current management position | See Table 1 | | -.05 | .08 | .13 | .20 | .03 | .05 | .12 | .09 | -.03 | .01 | -.06 | -.03 |
| 31. Age | See Table 1 | | .01 | .19 | .19 | .01 | -.12 | -.07 | .05 | .16 | .13 | .10 | .13 | .13 |
| 32. Gender | See Table 1 | | -.16 | -.06 | -.35 | -.08 | .17 | .08 | -.10 | .14 | -.05 | -.06 | .01 | -.04 |
| 33. Level of education | See Table 1 | | .05 | -.02 | .13 | .07 | -.21 | -.21 | -.05 | -.24 | .01 | .02 | .02 | .02 |

*Note.* N = 148-172. Coefficient alphas are on the diagonal in bold. Correlations equal to or greater than .14 are significant at $p < .05$ and have 95% confidence intervals that exclude zero.

Table 2 - Continued

| Variable | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 13. Emotional exhaustion | **.88** | | | | | | | | | | | | |
| 14. Cynicism | .57 | **.63** | | | | | | | | | | | |
| 15. Burnout (composite) | .93 | .84 | **.88** | | | | | | | | | | |
| 16. Idealized influence-attribution | -.08 | -.22 | -.15 | **.83** | | | | | | | | | |
| 17. Idealized influence-behavior | -.08 | -.18 | -.14 | .67 | **.67** | | | | | | | | |
| 18. Inspirational motivation | -.12 | -.24 | -.19 | .77 | .83 | **.84** | | | | | | | |
| 19. Intellectual stimulation | -.12 | -.19 | -.17 | .81 | .61 | .72 | **.82** | | | | | | |
| 20. Individualized consideration | -.04 | -.19 | -.12 | .79 | .65 | .73 | .79 | **.78** | | | | | |
| 21. Transformational leadership (composite) | -.10 | -.23 | -.17 | .92 | .84 | .91 | .89 | .90 | **.94** | | | | |
| 22. Management-by-exception-passive | .08 | .10 | .10 | -.65 | -.39 | -.47 | -.62 | -.55 | -.61 | **.81** | | | |
| 23. Laissez-faire | .11 | .18 | .16 | -.65 | -.36 | -.46 | -.53 | -.54 | -.57 | .68 | **.78** | | |
| 24. Passive leadership (composite) | .10 | .14 | .13 | -.71 | -.41 | -.51 | -.63 | -.59 | -.65 | .94 | .89 | **.82** | |
| 25. Abusive supervision | -.01 | .12 | .05 | -.37 | -.27 | -.34 | -.31 | -.41 | -.38 | .41 | .42 | .45 | **.77** |

*Note.* N = 148-172. Coefficient alphas are on the diagonal in bold. Correlations equal to or greater than .14 are significant at $p < .05$ and have 95% confidence intervals that exclude zero.

Table 2 - Continued

| Variable | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 |
|---|---|---|---|---|---|---|---|---|
| 13. Emotional exhaustion | -.09 | .53 | .07 | -.11 | -.00 | -.07 | .01 | .08 |
| 14. Cynicism | -.13 | .34 | -.02 | -.13 | .04 | -.14 | -.00 | .13 |
| 15. Burnout (composite) | -.12 | .50 | .04 | -.13 | .02 | -.11 | .01 | .11 |
| 16. Idealized influence-attribution | .17 | -.05 | -.02 | -.01 | -.12 | .01 | .03 | -.16 |
| 17. Idealized influence-behavior | .22 | .04 | .03 | .08 | -.11 | .06 | .02 | -.06 |
| 18. Inspirational motivation | .26 | -.03 | .00 | .03 | -.13 | .04 | -.01 | -.15 |
| 19. Intellectual stimulation | .15 | -.05 | .05 | .05 | -.10 | .05 | .07 | -.12 |
| 20. Individualized consideration | .21 | -.02 | .01 | -.03 | -.11 | .01 | .12 | -.18 |
| 21. Transformational leadership (composite) | .22 | -.02 | .01 | .03 | -.13 | .04 | .05 | -.15 |
| 22. Management-by-exception-passive | -.12 | -.05 | .10 | .02 | .16 | .06 | -.12 | -.00 |
| 23. Laissez-faire | -.04 | .02 | .03 | -.03 | .12 | -.02 | -.00 | .12 |
| 24. Passive leadership (composite) | -.09 | -.02 | .08 | -.00 | .16 | .03 | -.08 | .06 |
| 25. Abusive supervision | -.03 | -.05 | .00 | .04 | -.08 | .08 | .09 | .08 |

*Note.* N = 148-172. Coefficient alphas are on the diagonal in bold. Correlations equal to or greater than .14 are significant at $p < .05$ and have 95% confidence intervals that exclude zero.

Table 2 - Continued

| Variable | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 |
|---|---|---|---|---|---|---|---|---|
| 26. Extraversion | **.76** | | | | | | | |
| 27. Neuroticism | -.05 | **.59** | | | | | | |
| 28. Tenure with organization | -.14 | .07 | — | | | | | |
| 29. Total managerial experience | .02 | -.06 | .30 | — | | | | |
| 30. Tenure in current management position | -.12 | .05 | .41 | .46 | — | | | |
| 31. Age | -.10 | -.07 | .21 | .53 | .31 | — | | |
| 32. Gender | .03 | .13 | .18 | -.07 | .10 | -.10 | — | |
| 33. Level of education | -.06 | .11 | -.13 | -.09 | -.26 | -.22 | -.33 | — |

*Note.* N = 148-172. Coefficient alphas are on the diagonal in bold. Correlations equal to or greater than .14 are significant at $p < .05$ and have 95% confidence intervals that exclude zero.

Table 3. Confirmatory Factor Analysis for Original Measurement Model

| Model | $\chi^2$ (df) | $\Delta\chi^2$ ($\Delta$df) (compared to Model 1) | RMSEA | SRMR | CFI | IFI |
|---|---|---|---|---|---|---|
| 1. Seven factors (hypothesized model) | 547.91 (231) | | .09 | .08 | .91 | .91 |
| 2. Twelve factors (treating dimensions of leadership challenge demands as distinct factors) | 916.22 (243) | 368.31 (12)* | .13 | .12 | .85 | .85 |
| 3. Six factors (combining LSE and burnout) | 673.28 (237) | 125.37 (6)* | .10 | .09 | .88 | .89 |
| 4. Six factors (combining engagement and burnout) | 645.54 (237) | 97.63 (6)* | .10 | .09 | .89 | .89 |
| 5. Six factors (combining transformational leadership and passive leadership) | 623.44 (237) | 75.53 (6)* | .10 | .10 | .89 | .90 |
| 6. Six factors (combining transformational leadership and abusive supervision) | 868.10 (237) | 320.19 (6)* | .12 | .10 | .81 | .81 |
| 7. Six factors (combining passive leadership and abusive supervision | 741.72 (237) | 193.81 (6)* | .11 | .09 | .87 | .87 |

*Note.* RMSEA = Root mean square error of approximation, SRMR = Standardized root mean square residual, CFI = Comparative fit index, IFI = Incremental fit index.
*$p < .05$

Table 4. Confirmatory Factor Analysis for Modified Measurement Model

| Model | $\chi^2$ (df) | $\Delta\chi^2$ ($\Delta$df) (compared to Model 1) | RMSEA | SRMR | CFI | IFI |
|---|---|---|---|---|---|---|
| 1. Seven factors (hypothesized model) | 596.31 (292) | | .08 | .08 | .92 | .92 |
| 2. Twelve factors (treating dimensions of leadership challenge demands as distinct factors) | 971.27 (304) | 374.96 (12)* | .11 | .11 | .85 | .85 |
| 3. Six factors (combining LSE and emotional exhaustion) | 740.71 (298) | 144.40 (6)* | .09 | .10 | .88 | .88 |
| 4. Six factors (combining engagement and emotional exhaustion) | 711.53 (298) | 115.22 (6)* | .09 | .10 | .89 | .89 |
| 5. Six factors (combining transformational leadership and laissez-faire leadership) | 706.99 (298) | 110.68 (6)* | .09 | .09 | .89 | .89 |
| 6. Six factors (combining transformational leadership and abusive supervision) | 792.70 (298) | 196.39 (6)* | .10 | .10 | .83 | .84 |
| 7. Six factors (combining laissez-faire leadership and abusive supervision | 720.86 (298) | 124.55 (6)* | .09 | .10 | .89 | .89 |

*Note.* RMSEA = Root mean square error of approximation, SRMR = Standardized root mean square residual, CFI = Comparative fit index, IFI = Incremental fit index.
*$p < .05$

Table 5. Basic Mediation Model 1: Effects of Leadership Challenge Demands on Transformational Leadership through Engagement

| Regression Equation | Type of Effect | Value | 95% CI (LL, UL) |
|---|---|---|---|
| Leadership challenge demands → Engagement | First stage (H1a) | *B* = .194* | (.043, .344) |
| Engagement → Transformational leadership (controlling for leadership challenge demands) | Second stage (H3) | *B* = .162* | (.040, .285) |
| Leadership challenge demands → Engagement →Transformational leadership | Indirect | *ab*= .031* | (.002, .068) |
| Leadership challenge demands → Transformational leadership (controlling for engagement) | Direct | *B* = .137 | (-.025, .299) |
| Leadership challenge demands → Transformational leadership | Total | *B* = .168 | (-.009, .315) |

*Note.* Unstandardized regression coefficients and boostrapped 95% CIs are reported in the table. Estimates for direct, first stage, and second-stage effects were tested for significance with bootstapped 95% CIs based on normal approximation. Conversely, indirect and total effects were tested for significance with bias-corrected bootstrapped 95% CIs. Bootstrap sample size = 1,000. Regressions were run after controlling for the following variables: age, sex, education, total managerial experience, tenure in current management position, organization tenure, extraversion, neuroticism. CI = confidence interval; LL = lower limit; UL = upper limit.

Table 6. Basic Mediation Model 2: Effects of Leadership Challenge Demands on Passive Leadership through Burnout

| Regression Equation | Type of Effect | Value | 95% CI (LL, UL) |
|---|---|---|---|
| Leadership challenge demands → Burnout | First stage (H1b) | *B* = .260* | (.029, .491) |
| Burnout → Passive leadership (controlling for leadership challenge demands) | Second stage (H4b) | *B* = .085* | (.017, .153) |
| Leadership challenge demands → Burnout → Passive leadership | Indirect | *ab*= .022* | (.010, .080) |
| Leadership challenge demands → Passive leadership (controlling for burnout) | Direct | *B* = -.002 | (-.149, .145) |
| Leadership challenge demands → Passive leadership | Total | *B* = .020 | (-.140, .162) |

*Note.* Unstandardized regression coefficients and boostrapped 95% CIs are reported in the table. Estimates for direct, first stage, and second-stage effects were tested for significance with bootstapped95% CIs based on normal approximation. Conversely, indirect and total effects were tested for significance with bias-corrected bootstrapped 95% CIs. Bootstrap sample size = 1,000. Regressions were run after controlling for the following variables: age, sex, education, total managerial experience, tenure in current management position, organization tenure, extraversion, neuroticism. CI = confidence interval; LL = lower limit; UL = upper limit.

Table 7. Basic Mediation Model 3: Effects of Leadership Challenge Demands on Abusive Supervision through Burnout

| Regression Equation | Type of Effect | Value | 95% CI (LL, UL) |
|---|---|---|---|
| Leadership challenge demands → Burnout | First stage | *B* = .260* | (.029, .491) |
| Burnout → Abusive supervision (controlling for leadership challenge demands) | Second stage (H4a) | *B* = .010 | (-.025, .045) |
| Leadership challenge demands → Burnout → Abusive supervision | Indirect | *ab* = .002 | (.000, .029) |
| Leadership challenge demands → Abusive supervision (controlling for burnout) | Direct | *B* = .032 | (-.068, .132) |
| Leadership challenge demands → Abusive supervision | Total | *B* = .035 | (-.038, .204) |

*Note.* Unstandardized regression coefficients and boostrapped 95% CIs are reported in the table. Estimates for direct, first stage, and second-stage effects were tested for significance with bootstapped 95% CIs based on normal approximation. Conversely, indirect and total effects were tested for significance with bias-corrected bootstrapped 95% CIs. Bootstrap sample size = 1,000. Regressions were run after controlling for the following variables: age, sex, education, total managerial experience, tenure in current management position, organization tenure, extraversion, neuroticism. CI = confidence interval; LL = lower limit; UL = upper limit.

Table 8. Regression Results for LSE as a Moderator of Leadership Challenge Demands and Burnout and Engagement

| Variable | Burnout | | Engagement | |
|---|---|---|---|---|
| | *B* | 95% CI (LL, UL) | *B* | 95% CI (LL, UL) |
| *Control variables:* | | | | |
| Age | -.018 | (-.177, .142) | .093 | (-.014, .201) |
| Sex | -.057 | (-.324, .210) | .061 | (-.118, .241) |
| Education | -.008 | (-.159, .144) | .106* | (.004, .208) |
| Total managerial experience | -.042 | (-.158, .073) | .000 | (-.077, .078) |
| Tenure in current manager position | .002 | (-.106, .110) | -.010 | (-.083, .062) |
| Organization tenure | .069 | (-.069, .207) | .000 | (-.092, .093) |
| Extraversion | -.023 | (-.182, .136) | .156* | (.049, .263) |
| Neuroticism | .585* | (.396, .774) | -.202* | (-.329, -.075) |
| *Independent variables:* | | | | |
| Leadership challenge demands | .330* | (.094, .566) | .163* | (.019, .307) |
| LSE | -.213 | (-.455, .029) | .222* | (.054, .390) |
| *Moderating effect:* | | | | |
| Leadership challenge demands x LSE (H2a, H2b) | -.473* | (-.903, -.044) | -.090 | (-.445, .265) |

*Note.* Unstandardized regression coefficients and boostrapped 95% CIs based on normal approximation are reported in the table. Bootstap sample = 1,000. CI = confidence interval; LL = lower limit; UL = upper limit.

Table 9. Conditional Indirect Effects of Leadership Challenge Demands on Transformational Leadership, Passive Leadership, and Abusive Supervision at High and Low Levels of LSE

| Model | LSE -1 *SD* (-.471) | | LSE +1 *SD* (.471) | | Differences | |
|---|---|---|---|---|---|---|
| | *ab* | 95% CI (LL, UL) | *ab* | 95% CI | Δ*ab* | 95% CI (LL, UL) |
| Leadership challenge demands x LSE → Engagement → Transformational leadership (H5a) | .034 | (-.008, .104) | .019 | (-.022, .061) | -.014 | (-.098, .042) |
| Leadership challenge demands x LSE → Burnout → Abusive supervision (H5b) | .006 | (-.006, .045) | .001 | (-.001, .014) | -.005 | (-.039, .005) |
| Leadership challenge demands x LSE → Burnout → Passive leadership (H5c) | .047* | (.009, .132) | .009 | (-.000, .054) | -.038* | (-.117, -.002) |

*Note.* Unstandardized regression coefficients and bias-corrected boostrapped 95% CIs are reported in the table. Bootstrap sample size = 1,000. The following variables were controlled for in the analyses: age, sex, education, total managerial experience, tenure in current management position, organization tenure, extraversion, neuroticism. CI = confidence interval; LL = lower limit; UL = upper limit.

Table 10. Comparison of Hypothesized First-Stage Models to Nested Alternative Second-Stage Direct Effects Model.

| Model | $R^2_G$ | *Q* | *W* |
|---|---|---|---|
| Leadership challenge demands x LSE → Engagement → Transformational leadership (hypothesized model) | .397 | | |
| Leadership challenge demands x LSE → Engagement x LSE → Transformational leadership (alternative model) | .403 | 1.011 | -.698 (*ns)* |
| Leadership challenge demands x LSE→Burnout → Abusive supervision (hypothesized model) | .358 | | |
| Leadership challenge demands x LSE → Burnout x LSE → Abusive supervision (alternative model) | .362 | 1.006 | -.408 (*ns*) |
| Leadership challenge demands x LSE → Burnout → Passive leadership (hypothesized model) | .377 | | |
| Leadership challenge demands x LSE → Burnout x LSE →Passive leadership (alternative model) | .391 | 1.023 | -1.484 (*ns*) |

Table 11. Alternative Causal Models Analysis

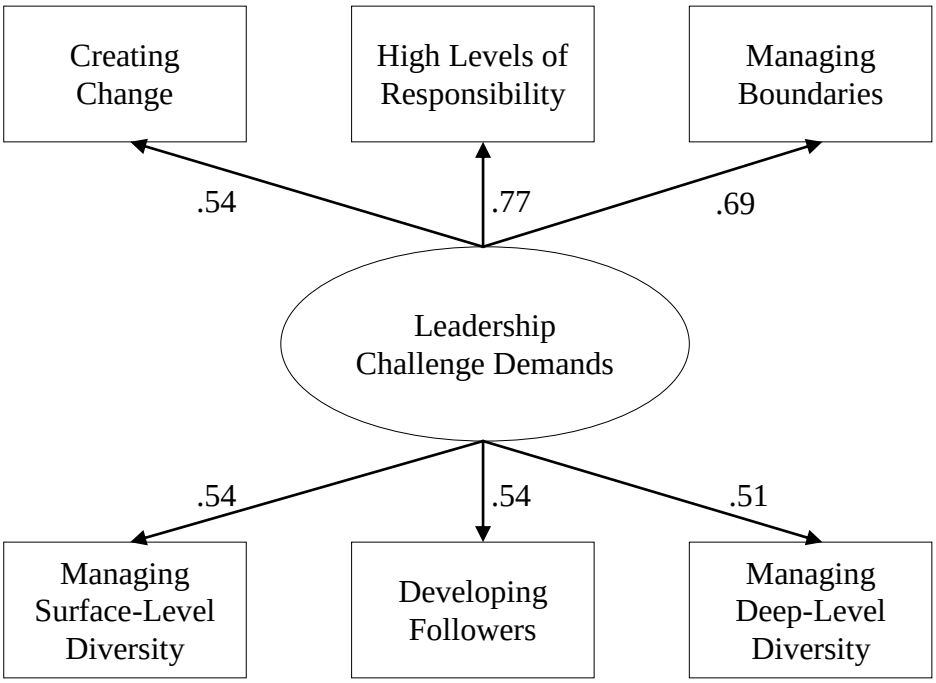
| Equation | Type of Effect | Value | 95% CI (LL, UL) |
|---|---|---|---|
| Alternative model 1: Cross paths from engagement to passive leadership | | | |
| Engagement → Passive leadership (controlling for leadership challenge demands) | Second stage | *B* = -.047 | (-.17, .051) |
| Leadership challenge demands → Engagement →Passive leadership | Indirect | *ab* = -.008 | (-.045, .002) |
| Leadership challenge demands → Passive leadership (controlling for engagement) | Direct | *B* = .029 | (-.125, .183) |
| Leadership challenge demands x LSE → Engagement → Passive leadership | Conditional indirect | *ab* (-1 *SD*) = -.010<br>*ab* (+1 *SD*) = -.006 | (-.067, .003)<br>(-.038, .005) |
| Alternative model 2: Cross paths from engagement to abusive supervision | | | |
| Engagement → Abusive supervision (controlling for leadership challenge demands) | Second stage | *B* = -.019 | (-.091, .013) |
| Leadership challenge demands → Engagement →Abusive supervision | Indirect | *ab* = -.003 | (-.022, .000) |
| Leadership challenge demands → Abusive supervision (controlling for engagement) | Direct | *B* = .038 | (-.067, .143) |
| Leadership challenge demands x LSE → Engagement → Abusive supervision | Conditional indirect | *ab* (-1 *SD*) = -.004<br>*ab* (+1 *SD*) = -.002 | (-.026, .000)<br>(-.020, .001) |

Table 11 – Continued

| | | | |
|---|---|---|---|
| Alternative model 3: Cross paths from burnout to transformational leadership | | | |
| Burnout → Transformational leadership (controlling for leadership challenge demands) | Second stage | *B* = -.081 | (-.162, .001) |
| Leadership challenge demands → Burnout → Transformational leadership | Indirect | *ab* = -.027* | (-.082, -.001) |
| Leadership challenge demands → Transformational leadership (controlling for burnout) | Direct | *B* = .189* | (.026, .352) |
| Leadership challenge demands x LSE → Burnout → Transformational leadership | Conditional indirect | *ab* (-1 *SD*) =-.045<br>*ab* (+1 *SD*) = -.009 | (-.140, .001)<br>(-.061, .001) |

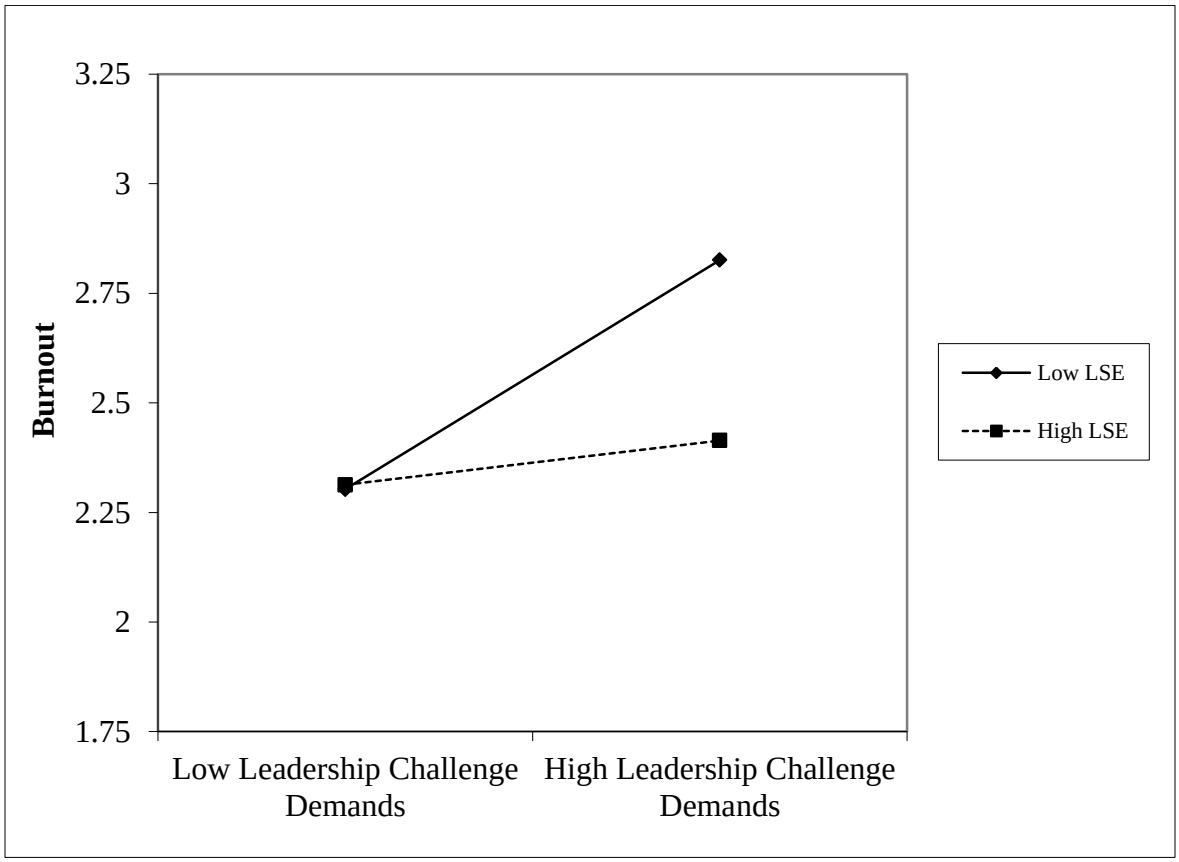
*Note.* Unstandardized regression coefficients and boostrapped 95% CIs are reported in the table. Estimates for second-stage effects were tested for significance with bootstapped confidence intervals based on normal approximation. Conversely, indirect and conditional indirect effects were tested for significance with bias-corrected bootstrapped confidence intervals. Bootstrap sample size = 1,000. The following variables were controlled for in the analyses: age, sex, education, total managerial experience, tenure in current management position, organization tenure, extraversion, neuroticism. CI = confidence interval; LL = lower limit; UL = upper limit.

Figure 2. Confirmatory Factor Analysis for Leadership Challenge Demands Construct




*Note.* All path coefficients are standardized and significant at $p < .01$.

Figure 3. Interaction Plot of Leadership Challenge Demands and LSE in Jointly Predicting Burnout



# CHAPTER V

# DISCUSSION

"It's like you are in final exams 365 days a year" (Hill, 2007, p. 3) were words used by one entry-level manager to describe the demands of leadership. Other words frequently used by managers to describe their leadership roles include stressful, overwhelming, arduous, and humbling (Hill, 2007). Yet, despite the fact that there are volumes of research studies that identify effective leadership behaviors and practices, there is far less research that addresses the demands and challenges of leadership and, more particularly, how leadership demands impact the way that leaders behave toward subordinates. Interestingly, this gap in research is reflective of the overall severe dearth in research identifying antecedents of leadership behavior, particularly antecedents that represent features of leaders' proximal environment. It is further interesting to note that a lack of research regarding challenging demands as a proximal situational antecedent of leadership behavior exists despite a growing belief among practitioners that "one of the best ways to develop a leader's skills is to continually provide demanding jobs" and that "successful leaders' careers are marked by a variety of challenging and stretch work assignments" (Eichinger, Lombardo, & Ulrich, 2004, p. 112).

The present study is meant to address these gaps in theory and research in order to inform leadership practices in organizations. I first integrated the challenging job assignments model (McCauley et al., 1994, 1999) with transactional stress theory to develop the concept of *leadership challenge demands*. Specifically, I argued that challenge in the context of leadership is manifested through six different challenge demands: creating change, managing at high levels of responsibility, managing

boundaries, managing surface-level diversity, managing deep-level diversity, and developing followers. I then developed a theoretical model based on transactional stress theory that investigated the competing effects of leadership challenge demands on transformational, passive, and abusive leadership behaviors through two key mediators: engagement and burnout. I proposed that while some leaders react favorably to leadership challenge demands in terms of experiencing high engagement and exhibiting transformational leadership behaviors, some leaders react to leadership challenge demands with high burnout and consequently engage in passive leadership or abusive supervision. Moreover, I hypothesized that whether a leader takes the "high engagement track" or "high burnout track" in response to leadership challenge demands depends on LSE. Leaders with low LSE were proposed to feel stronger burnout in response to leadership challenge demands and thus exhibit passive or abusive leadership, whereas leaders high in LSE were proposed to feel stronger engagement in response to leadership challenge demands and thus exhibit transformational leadership.

I tested the hypothesized research model using data from153 leaders and their direct reports at a *Fortune 500* company. Most of my hypotheses were supported. First, leadership challenge demands were positively related to both engagement and burnout, thereby supporting prior research findings in the stress literature regarding the dual effects of challenge demands on motivation and attitudes. Second, I found that the impact of leadership challenge demands on burnout was stronger for leaders low in LSE. However, contrary to predictions, leaders high in LSE did not experience stronger feelings of engagement in response to leadership challenge demands. Nevertheless, I did find that leaders high on engagement were perceived as exhibiting transformational

leadership with greater frequency. Moreover, leaders experiencing high burnout were perceived as more passive leaders. However, contrary to my predictions, leaders high on burnout were not perceived as more abusive in their behavior toward subordinates. Finally, I found support for a conditional indirect effects model in which the impact of leadership challenge demands on passive leadership (through burnout) was stronger for leaders low on LSE. It should be noted that these results held even after controlling for relevant dispositional, demographic, and experience-related characteristics of leaders.

The findings of this study can thus be briefly summarized in the following manner: while leadership challenge demands are related to transformational leadership through high engagement, leaders low in LSE react negatively to leadership challenge demands in terms of experiencing high burnout and engaging in passive leadership.

## Theoretical Contributions and Implications

The findings of this study build and contribute to theory in several ways: first, by identifying challenge demands specific to leaders; second, by linking leadership challenge demands to leadership behaviors; third, by illustrating the dual nature of developmental leadership challenges; fourth, by identifying self-efficacy as a moderator of challenge demands; and fifth, by exploring motivation and stress in the leadership role.

### Identifying Challenge Demands Specific to Leaders

At the outset of this study, I argued that while early research by Mintzberg (1972) and Stewart (1976) showed that managers face unique job demands compared to those faced by individual contributors, current conceptualizations and operationalizations of job demands tend to overlook this fact and instead focus on challenge demands that are widely applicable to non-managerial employees. Consequently, they fail to identify

challenge demands specific to leaders and thus fail to assess the impact of leader-specific demands on behaviors likewise specific to leaders. The results of this study showed that all the leadership challenge demands proposed in this study loaded on a higher-order factor. Moreover, leadership challenge demands operated very similar to other challenge demands in the literature in terms of their effects on affective-motivational and behavioral outcomes. For example, leadership challenge demands had significant positive effects on both engagement and burnout, similar to what was found by Crawford et al. (2010) for challenge demands that were not specific to leaders. Additionally, like Rodell and Judge (2009) found with challenge demands non-specific to leaders, I found that leadership challenge demands could influence "good" or "bad" leadership behaviors depending on leaders' affective reactions to the demands. Thus, this study potentially contributes to stress and leadership theories by identifying a group of challenge demands that are specific to leaders.

That said, it should be noted that post-hoc findings of my study could potentially minimize this contribution to some extent. Specifically, post-hoc analyses revealed a significant and moderate correlation between leadership challenge demands and role conflict ($r$ = .43). This correlation is not only higher than the relationship found between challenge and hindrance demands in prior research among non-managers ($\rho$ = .23; Crawford et al., 2010), but when controlling for role conflict, the results of my model were nullified. I conjectured earlier that this could be the result of partialing out meaningful variance in leadership challenge demands. Indeed, role conflict, defined as facing contradictory and competing demands at work, may be an inevitable element of leadership challenge demands because leaders with a high level of challenge demands

will often have competing expectations from a number of different stakeholders, such as superiors, third parties, and subordinates (Tsui, 1984). Given the overlap between leadership challenge demands and role conflict, it could be argued that the challenge-hindrance distinction may not be as useful of a way of classifying *leader* demands. Instead, perhaps the focus of future research on leadership challenges should focus primarily on understanding leaders' emotional and motivational reactions to the same set of demands, as it may be those reactions rather than the characteristics of the demands themselves that ultimately drive behavior.

In a different vein, at the outset of this study, I argued that the challenging job assignments model does very little to acknowledge relational-oriented challenge demands that leaders may face. Two relational challenge demands that I proposed in this study that are specific for leaders include *managing deep-level diversity* and *developing followers*. Results of my measurement model analysis showed that like the other dimensions of leadership challenge demands identified in the challenging job assignments model, these two demands loaded significantly onto the second-order leadership challenge demands factor. Including these relational demands may thus extend the challenging job assignments model because it introduces a more comprehensive taxonomy of task, relational, and change-oriented challenge demands that are specific for leaders than does the Job Challenge Profile.

At the same time, it could be argued that because all the dimensions of leadership challenge demands end up loading onto a single higher-order factor, there is little uniqueness in adding *managing deep-level diversity* and *developing followers* compared to using the Job Challenge Profile dimensions alone. This argument does in fact have

some merit. Specifically, when I analyzed my data using only the five dimensions included in the challenging job assignments model (creating change, high levels of responsibility, managing boundaries, managing diversity, job transitions), the results of my study remained the same. While these findings do support prior findings regarding a higher-order factor of challenging job assignments (labeled *developmental challenge* by DeRue and Wellman, 2009), they may also call into question the utility of adding the two dimensions of leadership challenge demands proposed in this study.

In sum, rather than making a strong argument that my study makes a theoretical contribution to leadership and stress theories by identifying challenge demands specific to leaders, I argue (with the benefit of hindsight, of course) that a more potent contribution of this study rests in understanding why leaders react in different ways—both psychologically and behaviorally—to challenging aspects of leadership. In other words, I now suggest that studying leaders' differential reactions to the same set of demands represents a more critical area for future research than identifying "challenge" or "hindrance" demands in the context of leadership.

**Leadership Challenge Demands and Leader Behaviors**

Before further expounding on the above point, it should first be recognized that a critical contribution of this research is showing that leadership challenge demands can trigger leaders to engage in either transformational leadership (through engagement) or passive leadership (through burnout). Establishing linkages between leadership challenge demands and these validated leadership behaviors is important because it represents a critical step toward understanding why leaders behave the way they do. In other words, the present study shifts the focus of leadership behavior as an *independent variable* to a

*dependent variable*, and from how "leaders make things happen" to how "things make leaders happen." This approach stands in stark contrast to the current trend in leadership research.

For example, to further illustrate the contribution of my study to the leadership literature, I conducted a short literature search on the Web of Science database to identify the number of studies that have been published on antecedents to transformational leadership from 1985 through 2011. In doing so, I searched 30 different management and I/O psychology journals at the "A" and "B" levels of quality for any studies measuring transformational leadership.[9] My search yielded a total of 454 studies that measured and tested transformational leadership in some way over the last quarter century. However, of these 454 studies, only 37 studies (8.2%) focused on examining antecedents of leadership, and of those studies, only six measured a situational antecedent. Shockingly, only one study examined what could be termed a "proximal situational antecedent" of transformational leadership (peer transformational leadership; Bommer et al., 2004). A separate search on passive leadership largely corroborated these results; however, I failed to identify even a single study which examined a situational antecedent of passive leadership. Thus, although researchers have a very good idea of the *consequences* of transformational and passive leadership, very little theory and research has been

[9] Articles were searched for in the following journals: *Academy of Management Journal, Journal of Applied Psychology, Organizational Behavior and Human Decision Processes, Journal of Management, Personnel Psychology, Organization Science, Journal of Organizational Behavior, Leadership Quarterly, Journal of Occupational and Organizational Psychology, Journal of Vocational Behavior, Journal of Business Ethics, Human Resource Management, Educational & Psychological Measurement, Journal of Applied Social Psychology, Group & Organization Management, Journal of Management Studies, International Journal of Selection and Assessment, Human Relations, Applied Psychology: An International Review, Small Group Research, Personality and Social Psychology Bulletin, Personality and Individual Differences, Journal of Business and Psychology, European Journal of Work and Organizational Psychology, Journal of Occupational Health Psychology, Personnel Review, Work and Stress, Canadian Journal of Administrative Sciences, Journal of Managerial Psychology.*

developed on situational antecedents of leader behaviors. Therefore, this study serves as an important step in shifting our focus toward understanding why leaders behave the way they do rather than just understanding whether or not certain leadership styles are important—a question which, in terms of transformational leadership, has been overwhelmingly supported in the research literature.

It is important to further note that the results of my study hold true even after controlling for the effects of personality, demographics, and organizational and managerial experience. This is an important finding in and of itself given that nearly all the existing research on antecedents to leadership behavior has focused on individual differences, particularly personality, in terms of how well they predict leadership behaviors. In essence, this research shows that certain situational characteristics predict leadership behavior above and beyond individual differences. Up to this point, in the few studies linking contextual characteristics to transformational leadership, none of them have controlled for personality or other key individual differences, which is likely a result of focusing solely on distal situational antecedents. This study thus identifies the range of demands, job characteristics, and experiences that are necessary for leaders to feel engaged and therefore exhibit transformational leadership beyond that which can be explained by dispositional, demographic, or experience-related factors. It also shows that passive leadership is more than just a function of dispositional tendencies. Indeed, the present study suggests that passive leadership can be driven by the situation, and particularly, by an interaction between the situation and the person, that is, between leadership challenge demands and LSE.

**Dual Nature of Leadership Challenge Demands**

Perhaps an even more novel theoretical contribution of this research is that a single contextual antecedent (i.e., leadership challenge demands) can predict multiple types of leadership behavior (i.e., transformational and passive leadership) in the same organization. This perspective stands in contrast to existing theoretical frameworks on antecedents to transformational leadership (or any leadership behavior for that matter; see Tepper, 2007) which focus on how multiple contextual elements impact one type of leadership behavior and thereby assume that incorporating (or preventing) certain contextual elements from emerging will universally result in the "good" or "bad" leadership behavior being studied. However, the present study represents the only attempt to empirically examine how leadership challenge demands—as a proximal situational characteristic of leaders' environment—can drive *both* "good" and "bad" leadership behaviors in the same organization. This presents a new approach to examining determinants of leadership behavior in the sense that it begins to investigate why a range of leadership behaviors can exist at varying levels in a single organization.

As an aside, it is interesting that leadership challenge demands predicted variance in transformational and passive leadership behaviors despite the fact that the sponsoring organization has a very strong culture of leadership where certain behaviors are clearly expected and rewarded. For example, in the sponsoring organization, managers' year-end bonuses are directly tied to subordinates' perceptions of how well their manager treated and individually developed them. In fact, 50% of their bonus is explicitly based on these so-called "people" results. This reward system, coupled with a long-standing commitment to leadership development and a well-communicated set of behavioral

expectations for leaders (which are closely aligned with all four dimensions of transformational leadership) creates a set of leadership norms that are fairly institutionalized in the organization. This may be one reason behind the somewhat low ICC(2) values on transformational, passive, and abusive leadership behaviors, as reported in Chapter 3. Yet, despite the existence of strong norms for "people-oriented" leadership, leadership challenge demands nonetheless caused some leaders in the organization to be perceived as more passive in their behavior beyond what could be explained by individual differences. Thus, I would conjecture that the findings of my study are very likely to replicate in other organizations, particularly in organizations where normative expectations of leadership behavior are not as clearly delineated.

Besides contributing to theoretical frameworks on leadership behavior, uncovering the dual nature of leadership challenge demands makes a significant contribution to the challenging job assignments model and theories regarding on-the-job learning in the leadership development literature. For example, prior scholarship by McCauley and colleagues, as well as scholars who have subsequently tested their model (e.g., Dragoni et al., 2009), have focused almost entirely on the benefits of challenging job assignments. Indeed, after a discussion among several leadership development scholars regarding the merits of experiential learning through challenging assignments, McCall (2010) proclaimed that "there doesn't seem to be much disagreement that experience should be at the heart of leadership development" (p. 62). However, a key theoretical contribution of the present study is the identification of potential downsides to challenging job assignments. Specifically, for leaders who are low in LSE, challenging job assignments can have the opposite effect of that which they are intended to have—

namely, it can cause leaders to "burn out and bottom out" (as described to me by an executive not affiliated with this study who uses challenging assignments for leadership development).

That researchers have tended to emphasize only the positive aspects of challenging assignments is likely a function of the theoretical frameworks they have drawn on to develop their models. In particular, prior studies on challenging job assignments are largely rooted in experiential and enactive learning cognition theories, which emphasize the value of challenging experiences and subsequent reflection activities in developing knowledge structures (Knowles, 1975; Kolb, 1984). Consequently, prior findings are based largely on retrospective accounts from successful leaders who may naturally be prone to positive-valenced memory and recall biases. Therefore, previous approaches to studying challenging job assignments essentially ignore the potential downsides of heavy demands and challenges in the leadership role. Moreover, because earlier studies have drawn almost exclusively on learning theories, they are largely dedicated to linking challenging assignments to learning outcomes rather than actual leader behavior. Although helpful, such a perspective does limit the scope of the challenging job assignments model and leaves it largely disconnected from traditional leadership research. Additionally, it overlooks how challenging assignments impact the emotions, motivation, and behaviors of leaders. Therefore, in contrast to prior research on developmental challenge, in the present study I drew on transactional stress theory not only to link developmental challenge to leadership behaviors and identify the affective-motivational process by which these relationships occur, but, perhaps more interestingly,

to illustrate how developmental challenge can potentially have negative effects on some leaders.

Thus, discovering the dual nature of challenging job assignments through the integration of transactional stress theory and the challenging job assignments model represents a critical contribution because, as noted earlier, it invites a more balanced and holistic view of the challenging job assignments model and stimulates a broader set of research questions than has previously been the case. In particular, it highlights the need for drawing on additional theoretical frameworks when investigating the utility of challenging assignments as leader development tools. Furthermore, it underscores the need for investigating contingencies of challenging assignments, and particularly, for understanding how to make challenging assignments developmental rather than detrimental. DeRue and Wellman (2009) did this to a certain extent by demonstrating the critical role of feedback in enhancing the learning benefits of challenging job assignments and offsetting a pattern of diminishing returns associated with challenging job assignments. Dragoni et al. (2009) further showed that challenging job assignments are highly beneficial for leaders with high learning goal orientation, but only slightly beneficial for leaders with low learning goal orientation. However, while each of these studies provide necessary clues to understanding contingencies of challenging job assignments, the current study takes this area of inquiry a step further not only by demonstrating that LSE is a moderator of challenging job assignments, but also by showing how challenging job assignments can go very sour for leaders and organizations when such assignments are given to leaders low in LSE.

**LSE as a Moderator of Leadership Challenge Demands**

With that in mind, I argue that identifying LSE as a moderator of leadership challenge demands represents a critical contribution to theory on work stress and challenging job assignments. First, although scholars have recently provided evidence suggesting that so-called challenge demands can trigger both positive and negative affective and behavioral responses (Crawford et al., 2010; Rodell & Judge, 2009), research has largely failed to identify why some people react negatively to challenge demands. Fortunately, the present study begins to answer this question by showing how LSE influences reactions to leadership-oriented challenge demands and thus represents one of the first attempts to uncover the complexity of challenge demands. That said, my earlier discussion calling into question the potential utility of the challenge-hindrance demand framework may in some ways weaken this contribution. However, it should still be noted that, overall, self-efficacy has not been examined very often as a moderator of job demands. The few studies that have examined interactions between job demands and self-efficacy have shown inconsistent effects. This could be due to a lack of matching the task domain of the self-efficacy measure—in this case, leadership—with the demands being measured—in this case, leadership challenge demands. However, my study shows that when task domains are matched with the demands being measured, self-efficacy does in fact interact with job demands. This finding highlights the importance of taking a more fine-grained and context-specific approach to investigating job demands and their potential moderators in the future.

In addition, understanding the role of LSE in triggering leaders' affective-motivational reactions to leadership challenge demands fulfills several recent calls for

theory building and research by leadership development scholars. In particular, McCall (2010) recently suggested that a key direction for leadership development research rests in understanding interactions between individual differences and challenging job assignments. Similarly, Dominick, Squires, and Cervone (2010) argued that social cognition and leadership development theories should be brought together in integrated frameworks to understand how cognitive processes shape the meaningfulness and effectiveness of developmental experiences. The current study represents the first attempt to integrate social cognitive theory with the challenging job assignments model and indicates that, by and large, challenging assignments are not an appropriate developmental tool for leaders lacking LSE. This contribution represents an important contribution to the leadership development literature by identifying a contingency variable of challenging assignments.

It is interesting to note, however, that the proposed interaction between leadership challenge demands, LSE, and engagement was not supported. Although the reasons for this non-finding are still a bit unclear, one potential explanation is that engagement is not as extreme of a reaction to leadership challenge demands as is burnout. Perhaps if an even "stronger" positive-valenced mediator were chosen, such as thriving (Spreitzer, Sutcliffe, Dutton, Sonenshein, & Grant, 2005), the proposed interaction would have been supported. In the end, however, this is merely a point of speculation.

**Motivation and Stress in Leadership Roles**

A final theoretical contribution of the present research regards the exploration of motivation and stress in leadership roles. In particular, the vast majority of work done on engagement and exhaustion has focused on non-managerial employees (Maslach et al.,

2001) despite the fact that researchers have long noticed the potential for engagement and emotional exhaustion to be even more potent among managers (Cordes & Dougherty, 1993; Kahn, 1992). In this regard, the present study fills a gap in the literature by examining engagement and burnout among leaders and linking it with outcomes more exclusive to leaders. Moreover, the present study provides initial guidance regarding stress in leadership roles, a severely understudied area of inquiry that should be given more theoretical and empirical attention in future research. This is particularly true given recent reports indicating that executives and managers often have the highest levels of stress compared to workers in other jobs, and that leaders' stress levels continue to rise at alarming rates in most organizations (American Psychological Association, 2007). However, most stress research is aimed at helping leaders know how to reduce stress for their employees without taking into account the stress that leaders face themselves. I suggest that it is important to further examine leader stress because it impacts leaders' behavior, and for better or worse, the attitudes and performance of employees, teams, and organizations. Thus, a focus on leader stress may provide clues to improving organizational leadership and thus on improving the work experiences of the recipients of leadership behaviors.

## Limitations and Future Directions

As with any research, there are a few limitations in this study that should be noted. First, I have focused only on transformational, passive, and abusive leadership behaviors as dependent variables. Moreover, engagement and burnout were modeled as the only mediators. Although these variables were carefully selected on the basis of transactional stress theory and the overall theoretical framework of this study, there are

likely other mediators between leadership challenge demands and the leadership behaviors examined in this study that could be identified in future research. For example, the main premise of the challenging job assignments model to date has been that challenging assignments increase managerial learning. Given that this relationship has been repeatedly supported in prior studies, on-the-job learning may be an important mechanism between leadership challenge demands and transformational leadership that could be investigated in subsequent research studies. Psychological empowerment is another mediator that could be explored inasmuch as low-LSE leaders facing high leadership challenge demands could feel a severe loss of control over their work, and this loss of control could be manifested in passive leadership behavior.

In addition to exploring additional mediators, there are likely other outcomes of leadership challenge demands that could be examined in future research. In particular, leadership behaviors such as empowering or ethical leadership should be examined as outcomes of leadership challenge demands. For example, does a high level of challenge prompt leaders to be more empowering in their behavior simply because they can't shoulder all their responsibilities alone? Moreover, can high leadership challenge demands—and the pressure that comes with it—motivate leaders to cut corners and engage in unethical leadership behavior? Besides leader behavior, job attitudes and especially turnover would be interesting to investigate as outcomes of developmental challenge. For instance, do leaders who become burned out from leadership challenge demands tend to leave their organization and pursue other job opportunities? Perhaps more interesting is the question of whether leaders who become engaged from leadership

challenges and thus exhibit transformational leadership are more likely to stay in the organization or perhaps pursue newer and perhaps brighter opportunities elsewhere?

Another weakness of this study is that it is impossible to be fully sure of the order of causal relationships in the model. However, these concerns are somewhat mitigated by the temporal sequence of my data collection, which was in line with the causal order of my hypotheses. Moreover, I controlled for experience-related factors such as tenure in one's current position, tenure in the organization, and total managerial experience to rule out a few alternative temporal explanations based on managers' experience. Still, it is impossible, in reality, to rule out all alternative temporal explanations without a repeated-measures longitudinal design. Thus, an important endeavor for future studies would be tracking the long-term effects of challenging assignments on leaders over a prolonged period of time, perhaps even years. For example, it is possible that over the long haul, some leaders are able bounce back from a state of emotional exhaustion and displays of poor leadership to a state of engagement and displays of transformational leadership. In bouncing back from these experiences, it is possible that leaders' efficacy can be built, thereby helping them in the future to confront challenges more effectively. Thus, because my study was done over a period of only three months, an interesting and fruitful avenue of future research would be creating longitudinal designs for studying the long-term effects of developmental challenge on leaders' behavior, turnover, and career progression.

In terms of methodological shortcomings, an additional weakness of this study concerns my measures for managing deep-level diversity and developing followers. Although the items for these scales were carefully developed based on the extant

literature on mentoring and coaching and with the help of subject matter experts, these scales should be empirically validated in a separate sample.

Finally, testing my hypotheses using the Edwards and Lambert (2007) method of moderated path analysis prevented me from doing two things. First, I was not able to test the entire model simultaneously as can be done in LISREL using structural equation modeling (SEM). Instead, I was forced to test three different mediated-moderation models separately. Second, the Edwards and Lambert method calls for computing path coefficients based on unstandardized regression coefficients, thus preventing any kind of comparison between the various effects in my model. That said, it should be recognized that there were trade-offs to using either approach. Although using SEM would have allowed me to investigate the model simultaneously with standardized coefficients, there are several limitations and complexities associated with modeling continuous interaction terms in LISREL. More importantly, LISREL does not allow for computing bias-corrected boostrapped confidence intervals to test for the significance of indirect and conditional indirect effects. At the same time, however, one may argue that the results of my study are tentative because the variables in my model were not tested simultaneously. To address that concern, I should point out that Kenny (2011) suggests that testing multiple mediation paths separately is an acceptable method when there is a small to moderate relationship between the mediators in the model, as is the case with the relationship between engagement and burnout (i.e., emotional exhaustion) in my model ($r$ = -.32). To further abate concerns with testing mediation paths separately, I ran an analysis in which my basic mediation paths were modeled simultaneously in LISREL. Results of this analysis are shown in Figure 4, which demonstrates that the results of the

mediation models did not differ across approaches. Thus, I believe that the Edwards and Lambert (2007) still provides the most robust and rigorous test of my model despite some of its potential limitations noted above.

## Implications for Practice

Because nearly all the existing research on antecedents to leadership behavior has focused on individual differences such as personality and cognitive ability, the implication of prior research on antecedents to leadership behavior has been that effective leadership will result from selecting the "right kind of person" for leadership roles (Bono & Judge, 2004). Although selection practices certainly play a critical role in fostering constructive leadership practices, an important implication of this study is that promoting effective leadership behavior is also about designing the "right kind of job." Indeed, the fact that relevant personality traits and demographic characteristics were controlled for in this study shows that certain challenging features of leaders' proximal environments promote effective leadership beyond key individual differences. This study can thus guide organizations in designing leader's jobs and assignments, and may be especially useful in identifying the range of demands, job characteristics, and experiences that are necessary for leaders to feel engaged and therefore exhibit leadership behaviors that bring about individual and group effectiveness.

At the same time, the present study also suggests that organizations should be careful about choosing the people to whom they give challenging assignments. Although there is certainly a case to be made for getting leaders to "step outside their comfort zones" through stretch assignments, results of this study also suggest that organizations should be extremely cautious about giving challenging job assignments to managers who

feel a lack of confidence in their leadership abilities. In fact, challenging assignments can severely backfire on organizations unless stretch assignments are given to managers with high LSE.

Despite the potential for challenging assignments to backfire on organizations, just because some leaders respond negatively to them does not mean that challenging assignments and demands should be abandoned as a leadership development tool. In fact, quite to the contrary, this study shows that challenge can be enormously helpful for engaging leaders and aiding their development as transformational leaders. Additionally, some organizations use challenging experiences as a means for selecting successors for leadership positions. In essence, organizations often throw those with leadership potential "into the fires to test their mettle" (McCall, 2010: 6). My study would certainly corroborate the use of challenging demands as a tool for "weeding out" leadership successors by showing that some leaders burn out in these "fires"—that is, by showing that some leaders cannot endure the heat of leadership challenges. The danger, of course, is that these burned out leaders end up exhibiting behavior that is harmful to individuals and groups in the organization. Practitioners should thus be aware that despite the benefits of leadership challenge demands for improving leader motivation and leader behavior, they do bear a certain degree of risk in adopting leadership challenge demands as a strategy for leadership development.

With that in mind, a key suggestion of this research is that organizations can enhance leaders' readiness for challenging assignments and thus benefit from them through initial actions aimed at building LSE. For example, traditional leadership development methods involving educational experiences can be used to prepare leaders

for challenging job assignments. Furthermore, coaching and mentoring programs can build efficacy through activities such as self-other appraisals and observational learning (Bandura, 1986). In that sense, I echo Day's (2010) point of caution on using challenging assignments alone as tools for developing effective leadership skills and behavior. Instead, I suggest that training, coaching, and mentoring programs can be used to prepare leaders for developmental experiences by increasing LSE.

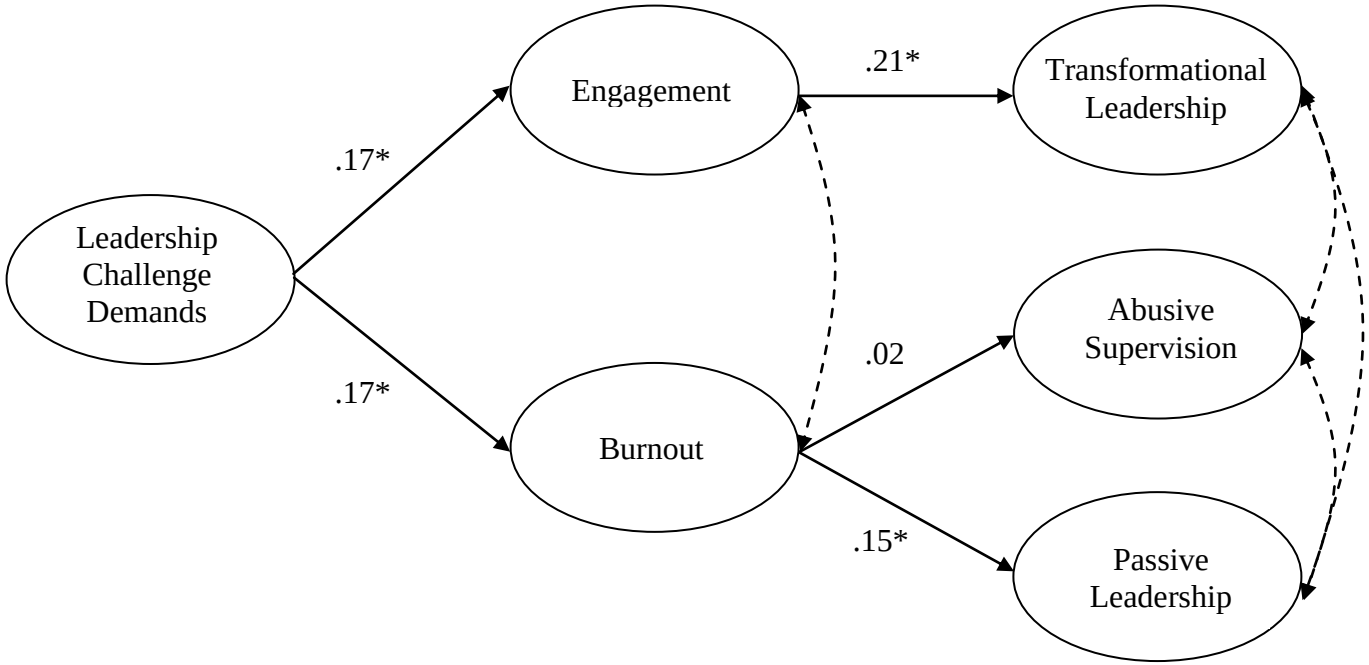
Finally, organizations should realize that leadership challenge demands can be used not just as learning tools, but also as tools for enhancing leaders' engagement. This is an important implication given the enormous focus on employee engagement in contemporary organizations (Harter et al., 2002; Macey & Schneider, 2008). Similarly, the present study suggests that organizations can improve leadership behavior through efforts aimed at increasing employee engagement, which, of course, can be enhanced through challenging assignments. Low-cost efforts to improve engagement and leader behavior such as challenging assignments may be particularly helpful in the current economy where companies are hard-pressed to expend funds for rewards or educational programs (Grant & Parker, 2009). Of course, as noted earlier, organizations should be careful about giving stretch assignments to people before they feel competent as leaders.

## Conclusion

Although far more work remains to be done on identifying antecedents to leadership behaviors and knowing how and why the challenges of leadership differentially impact leaders, this study represents a step in the right direction to understanding these issues. Specifically, while leadership challenges are capable of "firing up" leaders and aiding the development of transformational leadership, they are

also capable of "burning out" some leaders, particularly those who lack confidence in their leadership ability. In turn, low-LSE leaders who get "burned out" from leadership challenge demands become more passive in their leadership behavior. Organizations should thus take steps to build leaders' efficacy before providing them challenging and demanding experiences. By doing so, organizations can develop effective leadership practices toward the betterment of organizational members and the organization at large.

Figure 4. SEM Results of Basic Multivariate Mediation Model




*Note.* Standardized coefficients are reported. Fit of the causal model is as follows: $\chi^2$ (df) = 35.44 (22); RMSEA = .06; SRMR = .03; CFI = .96; IFI = .97. Paths for control variables were modeled as follows: extraversion and neuroticism to all variables; experience and tenure variables to engagement and burnout; sex to leadership behaviors; age and education to engagement and burnout.

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