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## Reevaluating the "magic spell" : examining empowerment, stress, and workplace outcomes

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REEVALUATING THE “MAGIC SPELL”:  
EXAMINING EMPOWERMENT, STRESS, AND WORKPLACE OUTCOMES

A Dissertation

Submitted to the Graduate Faculty of the  
Louisiana State University and  
Agricultural and Mechanical College  
in partial fulfillment of the  
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in

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Rucks Department of Management

by

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To my parents, Chen-Chang Tsai and Mei Wan, for your love and sacrifices to give me a better future. My accomplishments are also yours.

To mom and dad Robin and Fred Collins, with infinite gratitude, for your generous hearts, and for loving me as your own.

To my husband, Nick, for always standing by my side. You are my greatest blessing. I cannot wait to meet our sweet little joy!

To our Blair, the light of my life, mommy loves you to the moon and back!

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## **ABSTRACT**

Empowerment has long been believed to positively influence workplace outcomes such as performance and satisfaction, but empirical and anecdotal evidence suggest this influence is frequently weak. The present study explores the theoretical links among aspects of structural and psychological empowerment, challenge and hindrance stress appraisals, and employee performance and well-being within workplace settings. Hypotheses were tested with data obtained from individual employees and their supervisors from a diverse range of industries and organizations. Results demonstrate that accountability positively affects appraisals of challenge and hindrance stress; felt hindrance stress adversely affects employee well-being; proactive personality moderates the relationship between authority-sharing and challenge stress; and locus of control moderates the relationship between empowerment practices and challenge stress appraisal. These findings broaden the focus of prior research by addressing why the so-called “magic spell” of empowerment may sometimes fail to improve performance and well-being.

## CHAPTER ONE: THE DISSERTATION TOPIC

Suppose someone offered you a magic spell which could (a) increase performance (b) give you more time at work to set strategy and plan developments, and (c) improve the service you give to your customers, and then told you the cost: nothing at all. Would you turn the offer down? I doubt it. This 'magic spell' is called empowerment.

Mitchell-Stewart (1994: 6)

Since the mid-1990s, many practicing managers have pinned their hopes on empowerment as a cure-all for performance problems (Anderson & Huang, 2006; Argyris, 1998). An earlier perspective on employee empowerment is derived from the definition of bestowing power upon others. This perspective, however, has evolved over time to focus on how managers alter a workplace context to allow employees to exercise power (Honold, 1997). Kanter (1977) defined empowerment as giving power to individuals in lower level organizational positions, and she describes a continuum of power from powerlessness to empowered. Managers have been attracted to the notion of empowerment because empowered employees are expected to work both more effectively and efficiently (Conger & Kanungo, 1988). Academic researchers have also been attracted to notions of empowerment and have generally argued that positive outcomes will result when employees are given more power (Janssen, 2004; Kirkman & Rosen, 1999; Thomas & Tymon, 1994). For example, empowerment is believed to produce higher employee commitment (Thomas & Velthouse, 1990) and increase the likelihood that employees will persist in their effort when faced with difficult situations (Spreitzer, 1995). As another example, Seibert, Silver, and Randolph (2004) found that empowerment is positively related to employee performance and job satisfaction.

Empowerment is most commonly described as being comprised of two primary elements: structural empowerment and psychological empowerment (Conger & Kanungo, 1988; Menon, 2001; Thomas & Velthouse, 1990). Structural empowerment concerns work design and

practices, including authority-granting tactics such as delegation (Burke, 1986; Leana, 1986) and participative or consultative decision-making (Spreitzer, Kizilos, & Nason, 1997; Vroom & Jago, 1988). The structural element of empowerment entails “the granting of power and decision-making authority” to employees and, thus, involves “granting employees the ability to significantly affect organizational outcomes” (Menon, 2001: 156). It is conceptualized as including authority over one’s job, authority over broader issues (e.g., unit or organization level strategic decisions), and accountability (Menon, 2001; Robbins, Crino, & Fredendall, 2002). As Robbins, Crino, and Fredendall (2002) explain, structural empowerment expands conventional involvement, participation, delegation, and other such practices, in that, authority and responsibility are extended beyond employees’ specific job activities.

Psychological empowerment, on the other hand, refers to employees’ perceptions or beliefs that they are empowered. It is conceptualized as a mediator between structural empowerment and its expected outcomes (Morgeson & Campion, 2003). Frequently treated as conceptually equivalent to intrinsic motivation, the concept of psychological empowerment was introduced in partial recognition that objective empowerment practices will not result in expected outcomes unless they produce certain cognitive responses within employees (Spreitzer, 1995, 1996; Thomas & Velthouse, 1990). These cognitive responses include perceptions of meaning, impact, self-determination, and competence, reflecting employees’ orientation to their work roles (each term will be defined in Chapter 2; Spreitzer, 1995). The idea that individual employees cognitively appraise and respond to the work environment also necessarily implies that empowerment practices can be experienced differently across individuals and, thus, produce varying responses (Bartunek, 1995). A potential limitation of the psychological empowerment literature is that typical conceptualizations are only in terms of desirable work-related cognitions



(e.g., sense of control over a work environment, an active orientation toward work). If empowerment can, indeed, be experienced differently across individual employees, structural empowerment practices may not only result in the positive response of psychological empowerment.

Supporting this possibility, empirical and anecdotal evidence suggest structural empowerment does not always lead to its commonly hypothesized outcomes and is only effective with some employees (Marino, 1997; Randolph, 2000). Additionally, there are conceptual reasons to believe that empowerment may have a “dark side” (Case & Singer, 1997: 13). Implementing structural empowerment means organizations go through changes, such as decentralization and flattening of their managerial hierarchy (Thompson, 1995). Such changes can result in greater accountability and increased work demands being placed on empowered employees (Morrell & Wilkinson, 2002). The nature of these changes implies employees will face increased uncertainty and ambiguity, regarding their work roles and responsibilities, leading some scholars to argue that empowerment heightens anxiety and stress in those thereby affected (Marino, 1997). This argument raises the possibility that, even when empowerment yields positive organizational outcomes, it may not be welcomed by all employees (Randolph, 2000; Schrage, 2001; Thompson, 1995).

Little academic attention has been directed toward exploring structural empowerment’s potential limitations and the circumstances under which they most often occur. A more complete knowledge of these constraints will help researchers and practitioners better understand when empowerment is likely to reach its full potential. If empowerment is not welcomed by all employees, one way to understand empowerment and its potential limitations is through examining (a) possible work-related cognitions and (b) how these are associated with employee

well-being. Because employees' workplace experiences are also shaped by their unique characteristics, it might also be useful to consider how employees' personalities shape relationships between their appraisals of structural empowerment and its perceptual outcomes. Doing so ensures that the role of individual differences in such appraisals is not overlooked. Because the role of cognitive appraisal is key in both the empowerment and workplace stress literatures, one avenue for exploring the limitations of structural empowerment is through the experienced stress that might result from appraisals of the former. That is, just as individuals cognitively appraise structural empowerment practices, they also appraise workplace stressors (Folkman, Lazarus, Gruen, & DeLongis, 1986), with the same stressors potentially producing positive and negative appraisals (Lazarus, DeLongis, Folkman, & Gruen, 1985; Simmons & Nelson, 2001).

Scholars typically describe motivational mechanisms, or what some call a "motivational mode of influence" (Langfred & Moye, 2004; Wagner, Leana, Locke, & Schweiger, 1997), as the means by which structural empowerment ultimately influences desirable employee outcomes (e.g., performance). Structural empowerment is expected to enhance employee motivation (e.g., psychological empowerment; Spreitzer, 1995, 1996), and motivation is believed to be positively related to performance. That is, employees will cognitively appraise objective characteristics (e.g., structural empowerment) associated with their work, and their appraisals will produce certain psychological states that ultimately influence their behaviors. The empowerment literature, for example, generally assumes all employees have needs for responsibility, self-determination, and influential work. If, due to the empowerment practices in place, employees appraise their jobs as fulfilling these needs, they are expected to be motivated (i.e., experience psychological empowerment) and will, in turn, work hard to exhibit high levels of performance.

Although some empowerment scholars acknowledge that any given set of objective workplace characteristics is unlikely to be appraised equivalently by all individuals (Menon, 2001), the empowerment literature fails to explicitly consider the possibility that some employees will appraise structural empowerment practices negatively or both negatively and positively. In other words, it is frequently assumed that empowerment practices will be viewed by employees as desirable opportunities. The possibility that some employees also view increased authority as threatening or frightening has received almost no attention – despite recognition by some that empowerment practices present employees with greater uncertainty and ambiguity from added responsibility or accountability, and might produce feelings of stress (Marino, 1997). If the latter possibility is correct, individual cognitions (e.g., stress-related appraisals) beyond psychological empowerment may mediate the relationship between structural empowerment practices and outcomes.

Multiple streams of research in the workplace stress literature are consistent with the motivational mechanisms (e.g., psychological empowerment) by which structural empowerment is expected to lead to performance outcomes. On the surface, perhaps the most obvious connection between the stress and empowerment literatures can be found in the job demand-control (JD-C) model (Karasek, 1979; van der Doef & Maes, 1999). The basic premise of the JD-C model is that work will be most stressful when high levels of demands are placed on employees without giving them required resources and comparable control to deal with those demands. Alternatively, when employees are given control, even highly demanding work situations will not produce high levels of stress within employees and may even be motivational. Control, which Karasek (1979) originally referred to as “decision latitude,” is also commonly defined as task autonomy and “involves the freedom to determine how one’s work gets done,

setting one's own goals, using one's skills at work, and having the opportunity to contribute to decision making" (Mauno, Kinnunen, & Ruokolainen, 2006: 213). Although indicators of job control may be conceptually similar to those of structural empowerment, there are at least three reasons why the JD-C model cannot be applied to either psychological or structural empowerment to suggest that greater empowerment necessarily reduces stress and, thereby, improves performance in all employees.

First, empowerment goes beyond mere task autonomy or control over the timing and methods of work because it introduces added accountability and, in addition, includes authority over issues extending beyond normal job duties (Menon, 2001; Robbins et al., 2002). There is the possibility that empowerment practices simultaneously result in perceptions of both greater job control and greater job demands. Second, the JD-C model does not take into consideration the possibility that what is experienced (i.e., cognitively interpreted) primarily as control by one employee may be experienced primarily as demand by another. Two employees can appraise the same objective job characteristics differently such that one experiences stress and the other does not, even though both are faced with the same work conditions (Lazarus & Folkman, 1984). Finally, empirical support for the notion that greater control buffers the stressful effects of greater demands has been inconsistent, leading some researchers to call for consideration of how employees appraise their objective work environment and its job demands (Mauno et al., 2006).

As an alternative to JD-C, stress models that allow for cognitive appraisal may better explain the circumstances under which empowerment fails to lead to positive work-related outcomes (i.e., improved performance) and, simultaneously, to decreased employee well-being (i.e., greater strain). These latter models may better explain the possibility of negative outcomes from structural empowerment because they consider individual differences in cognitive

appraisals and how these differences influence employee outcomes. The transactional model of stress suggests that employees appraise potential objective workplace stressors (e.g., structural empowerment practices) either favorably or unfavorably (Folkman et al., 1986) and these appraisals may lead to both negative and positive outcomes (Lazarus et al., 1985). Building on the logic of the transactional model, it has been suggested that workplace stress can be categorized as either challenge- or hindrance-related (LePine, Podsakoff, & LePine, 2005). Whereas challenge stress is believed to stem from obstacles to be overcome so as to achieve and learn, hindrance stress is believed to stem from undesirable constraints that interfere with individuals' abilities to achieve personal or organizational goals (Cavanaugh, Boswell, Roehling, & Boudreau, 2000). Although both categories are expected to be stressful (e.g., in terms of anxiety and exhaustion), only challenge stress is thought to enhance individual performance and result in personal growth (LePine et al., 2005).

Viewing challenge stress as a potential source of motivation highlights its congruence with the empowerment literature. How objective job characteristics influence work motivation can be examined through the appraisal process described by Lazarus and Folkman (1984). Within this process, workplace stress experienced as challenging is likely to be motivating because individuals believe that, through their effort, they will be able to overcome obstacles so as to secure outcomes (such as achievement and learning) that they personally value (LePine et al., 2005). Even though empowerment practices have not been shown to produce the negative perceptions associated with hindrance stress, I propose that, in some instances, structural empowerment will produce such perceptions and, thus, a decline in individual performance. That is, depending on how they are appraised, I propose empowerment practices may lead individuals to experience both challenge and hindrance stress.

What determines the extent to which an individual experiences structural empowerment as challenging or hindering? Both the empowerment and transactional literatures suggest that personality characteristics may moderate relationships between objective empowerment practices and how employees cognitively appraise those practices. That is, both literatures suggest that, given varying personality characteristics, some employees may be more likely to appraise a work environment as primarily positive, whereas others may appraise it as primarily negative. Turning first to the transactional literature, Folkman, Lazarus, Gruen, and DeLongis (1986) argue that stress occurs when individuals appraise their environments as taxing or exceeding their resources. Personality characteristics may influence the extent to which employees appraise aspects of their environments (e.g., empowerment practices) as stressful. In the empowerment literature, Robbins, Crino, and Fredendall (2002) contend that individual differences moderate relationships among objective job characteristics (e.g., structural empowerment practices) and employees' appraisals of their work environments. Specifically, they argue that self-perceptions shape the impact of job characteristics on employees' cognitive appraisals and, ultimately, their behavior by either enhancing or diminishing this connection (Weiner, 1974, 1986).

Building on these arguments, the present study examines four personality characteristics as potential moderators of the structural practice–challenging/hindrance stress relationship: proactive personality, locus of control, generalized self-efficacy, and generalized self-esteem. These personality characteristics were chosen because they are consistent with the emphasis in both the empowerment and transactional literatures on personal resources and capability, active engagement, and personal initiative. Each also has a conceptual link with employee motivation and performance (Bernardi, 1997; Gist & Mitchell, 1992; Seibert, Crant, & Kraimer, 1999). Finally, they have all been conceptualized as traits rather than states, suggesting they likely

provide a stable psychological frame through which one's work environment is viewed and appraised. I will discuss the rationale behind the four personality characteristics in greater detail in Chapter Two.

Figure 1 presents the conceptual scheme to be tested in the proposed dissertation. The term conceptual scheme is used because the goal at this initial stage is to explore structural empowerment as a phenomenon, rather than to test a fully specified model. Although research does not consistently operationalize structural empowerment in terms of a given set of practices, it is commonly conceptualized as practices that grant employee decision-making authority and greater accountability (Eylon & Bamberger, 2000; Robbins et al., 2002; Spreitzer et al., 1997). Three indicators of structural empowerment will be examined: participation, delegation, and accountability. As described in and consistent with the transactional literature, the four personality characteristics are posited to moderate the relationships between aspects of structural empowerment and both challenge and hindrance stress. According to Lazarus and Folkman (1984), a workplace setting may simultaneously produce feelings of both challenge and hindrance stress. Individuals who score at higher levels in the above specified personality characteristics are expected to experience greater challenge stress and less hindrance stress as a function of structural empowerment. Alternatively, individuals scoring lower are expected to experience greater hindrance stress than challenge stress.

Although it is possible that there are interrelations among the specified personality characteristics, theory has not reached a level to justify multi-way interactional hypotheses. Further, consideration of all possible combinations of interactions among the focal personality characteristics would risk capitalizing on chance findings, thus, inflating the likelihood of Type

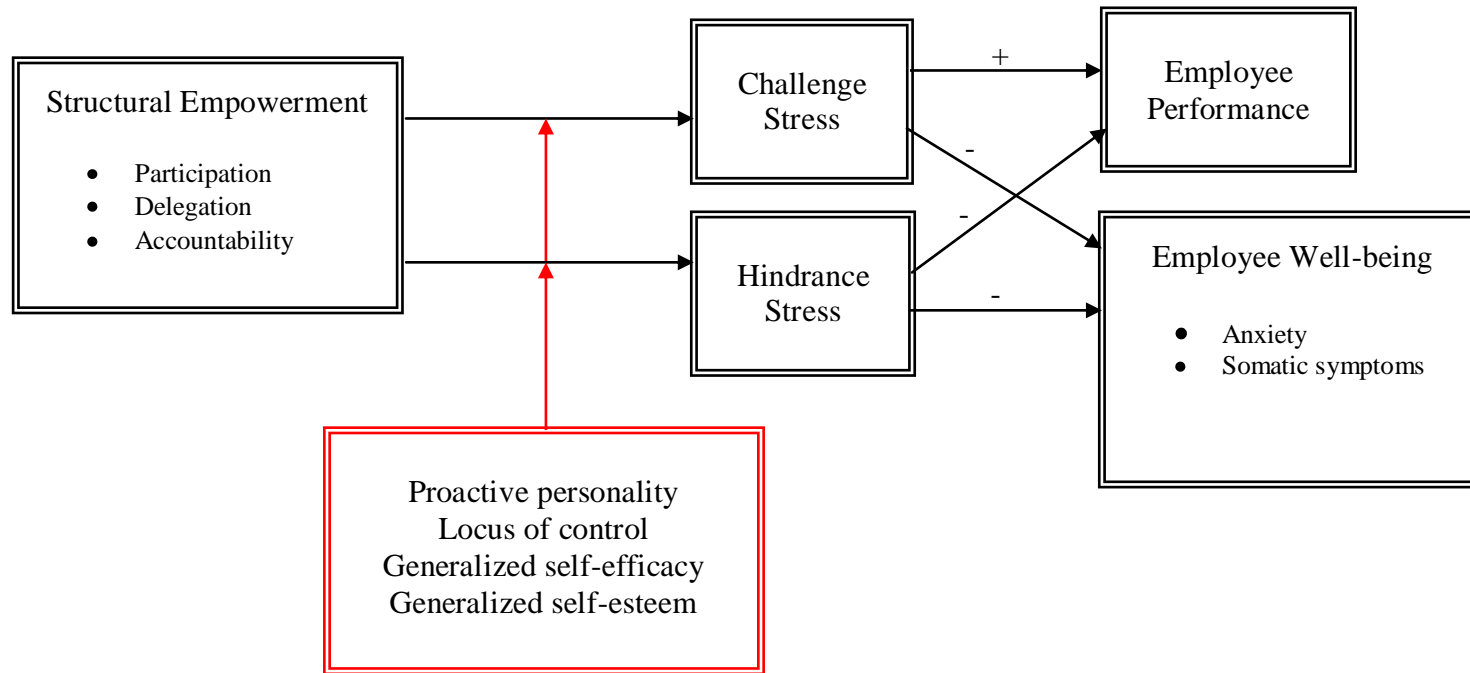


Figure 1  
Model of Structural Empowerment and Workplace Outcomes



II error. Hypotheses and analyses in the proposed dissertation will, thus, individually analyze the interactions of each personality characteristic with selected structural empowerment practices.

The transactional model may also help explain the circumstances under which structural empowerment may lead to poor performance and decreased well-being. When employees appraise empowerment practices positively (i.e., experience feelings of challenge) or negatively (i.e., experience feelings of hindrance), their performance may either improve or worsen, depending on the favorability of their appraisals. In turn, the relationship between structural empowerment and performance is expected to be mediated by challenge stress and hindrance stress, with challenge stress leading to improved employee job performance, and hindrance stress producing diminished performance. Both challenge and hindrance stress are expected to be straining for employees as indicated by lower levels of well-being. Past research defines employee well-being as the overall quality of an individual's experience and functioning at work (Warr, 1987). Although it has been operationalized in many different ways, two commonly used indicators of well-being are the absence of anxiety and somatic complaints (Meir & Melamed, 1986). As transmitted by both challenge and hindrance stress, the relationship between structural empowerment and well-being is expected to be negative.

Taken as a whole, the proposed conceptual scheme suggests that structural empowerment may produce performance gains for only some employees and may produce some degree of strain for all employees. The conceptual scheme will provide researchers and practitioners with insights into structural empowerment's potential boundaries. Examining issues such as whether aspects of structural empowerment influence employees' appraisal of job demands and how work-related employee outcomes are related to employee well-being will further understanding of the relationships between empowerment practices and performance. In doing so, the present

dissertation sheds light on how the so-called “magic spell” of empowerment impacts workplace behavior. The present dissertation also contributes to the transactional and challenge/hindrance stress literatures by exploring the role of personality in the cognitive appraisal of empowerment practices. Addressing the potential mediating roles of both positive and negative challenge and hindrance stress and the proposed moderating effects of selected personality characteristics will help answer the question of why empowerment practices may at times not lead to improved performance and enhanced employee well-being. It is hoped that the proposed dissertation will likewise help address empirical inconsistencies associated with the belief that greater control buffers the stressful effects of greater workplace demands.

## **CHAPTER TWO: CONCEPTUAL SCHEME AND HYPOTHESES**

The present dissertation explores theoretical links between aspects of structural and psychological empowerment, challenge and hindrance stress appraisals, and employee performance. Specifically, possible cognitive and perceptual outcomes of structural empowerment that go beyond psychological empowerment and how these outcomes are associated with employee well-being will be examined. As shown in Figure 1, I will argue that challenge and hindrance stress mediate relationships between selected empowerment practices and both employee performance and well-being. Additionally, I propose that personality characteristics such as proactive personality, locus of control, generalized self-efficacy, and generalized self-esteem moderate the extent to which an individual appraises structural empowerment as challenging or hindering. In this chapter, I review research relevant to these arguments, particularly drawing on the empowerment and challenge/hindrance stress literatures. I also present a series of hypotheses regarding the relationships depicted in Figure 1.

### **Empowerment**

As discussed in Chapter 1, empowerment may be described as being comprised of two categories: structural empowerment and psychological empowerment. I discuss the two categories separately, beginning with structural empowerment. Although multiple definitions of structural empowerment exist in the literature, it is generally defined as practices and work design that grant power and decision making authority to employees (Burke, 1986; Eylon & Bamberger, 2000; Kanter, 1977; Menon, 2001; Robbins et al., 2002; Thomas & Velthouse, 1990; Wilkinson, 1998). For instance, Eylon and Bamberger define structural empowerment as follows: "...empowerment occurs when objective structural conditions in the workplace are changed or enhanced such that job incumbents have greater decision latitude in their work and

greater overall influence in their workplaces” (2000: 355). This definition highlights two distinguishing features of structural empowerment. First, structural empowerment emphasizes objective characteristics of employees’ work environments, as opposed to their thoughts, feelings, and attitudes about them. Second, structural empowerment implies that authority granted to employees goes beyond their specific job duties and may include influence over broader issues, such as those related to employees’ units or overall organizations.

Researchers have used a wide variety of practices and work characteristics as indicators of structural empowerment, with little agreement on how it should be operationalized. Among the many practices treated as indicators of structural empowerment are communication and information sharing (Blau & Alba, 1982), training and rewards (Conger & Kanungo, 1988), and general employee involvement (Wilkinson, 1998). Arguably, though, the practices most commonly treated as indicators of structural empowerment are those that directly provide some opportunity for employees to participate in decision-making. Such practices include employee participation (e.g., consultation; Menon, 2001), participative decision-making (Kanter, 1977), and delegation (Burke, 1986; Menon, 2001). Conceptually associated with participative practices is the notion that these practices create task environments that are low in routinization and less predictable (Conger & Kanungo, 1988). Additionally, multiple scholars have highlighted that increased responsibility or accountability is an important component of structural empowerment (Eylon & Bamberger, 2000; Robbins et al., 2002). That is, when structural empowerment exists, employees are expected to be held accountable for the results of their empowered actions. For the purposes of this dissertation, structural empowerment will be operationalized in terms of participation, delegation, and accountability.

Regardless of how structural empowerment is operationalized, scholars tend to draw on logic first introduced in the employee participation literature to explain its effects on individual-level outcomes. That is, structural empowerment practices are expected to have both motivational and cognitive effects on employees that produce certain personal outcomes (Langfred & Moye, 2004; Wagner et al., 1997). The logic underlying the motivational mode (also referred to as the “working harder” mode) suggests the most immediate effect of structural empowerment will be higher levels of employee need-satisfaction as manifested in the interestingness and meaningfulness of their work, and opportunities for self-expression (Locke & Schweiger, 1979; Macy, Peterson, & Norton, 1989; McGregor, 1960). Thus, this mode of influence explains the relationship between empowerment practices and outcomes by proposing that the former help employees fulfill higher order needs. The drive for fulfillment is equated with employee motivation, and motivated employees, other things being equal, are expected to exhibit improved performance (Locke & Schweiger, 1979; Miller & Monge, 1986).

The cognitive mode of influence (also referred to as the “working smarter” mode) builds on the logic that empowerment practices allow employees to work smarter than they otherwise would because it gives them the opportunity to apply their relevant knowledge, skills, and abilities (KSAs) to decisions, problems, and tasks that can benefit from, but normally do not receive, such direct employee contributions (Leana & Florkowski, 1992; Locke et al., 1979; Miller et al., 1986). An additional commonly cited expectation is that the attendant increase in information flow (e.g., bi-directionally between subordinates and supervisors, and among employees) creates employees who are capable and knowledgeable about organizational processes and goals, as opposed to only about their specific jobs (Lawler & Hackman, 1969;

Locke & Schweiger, 1979). As is the case with the motivational mode of influence, the cognitive mode also indicates structural empowerment improves employee performance.

As suggested above, performance and job satisfaction are perhaps the two ultimate outcomes most commonly expected from empowerment practices. To date, however, research exploring the relationship of empowerment practices with these outcomes exhibits weak and mixed results. Some studies have found practices such as participation and delegation to be significantly related to performance and satisfaction (e.g., Connor, 1992; Lam, Chen, & Schaubroeck, 2002; Latham & Yukl, 1975; Neider, 1980). Although studies of delegation are sparse, researchers often find it to be positively related to individual performance (Leana, 1986, 1987). Schriesheim et al. (1998), in particular, observed delegation to have significant main effects on both performance and satisfaction. They also cite several unpublished studies reporting moderate to weak relationships between delegation and satisfaction. Beyond individual studies, meta-analytic and narrative reviews indicate relationships between participation and performance are generally weak on average, and authors of these reviews often conclude that participation likely has little practical value for managers who practice it (Cotton, Vollrath, Froggatt, Lengnick-Hall, & Jennings, 1988; Locke & Schweiger, 1979; Wagner, 1994; Wagner et al., 1997). In the practitioner literature, anecdotal evidence suggests only selective impact from structural empowerment (Marino, 1997; Randolph, 2000). Further, some research suggests there is substantial employer skepticism about empowerment effectiveness (Ahlbrandt, Leana, & Murrell, 1992; Case & Singer, 1997). It also is worth noting that, because of the emphasis on job performance, little or no structural empowerment research has explicitly considered its effects on employee well-being (Laschinger, Shamian, & Thomson, 2001). The influence of structural empowerment on outcomes such as anxiety and health remains unclear.

The results described above raise the question: Why does research fail to consistently find strong positive relationships between various empowerment practices and employee job performance? I suggest there are at least three possible explanations for observed weak or negative empowerment-performance relationships – all three of which have received little attention in the empowerment literature. First, empowerment practices may introduce greater uncertainty or ambiguity into a work environment (Farh & Scott, 1983; Lawler, 1973). For instance, as more decision-making tasks are delegated to employees and they are given greater autonomy (sometimes for tasks or decisions that go beyond their immediate jobs), it would seem less likely that employees are performing predetermined and predefined jobs tasks. Indeed, as described above, structural empowerment has been operationalized in terms of non-routine tasks and environments (Robbins et al., 2002). Although uncertainty and ambiguity can add interest and excitement to one's work day, they can also add greater stress and anxiety as employees struggle to find effective solutions to difficulties not previously experienced. Second, structural empowerment may place greater demands on employees (Eylon & Bamberger, 2000; Mills & Ungson, 2003). That is, as employees engage in decisions and tasks that go beyond their immediate jobs, they may find that their workloads increase and become more cognitively difficult. Dealing with uncertainty and ambiguity might also make their work more demanding. Third, structural empowerment is often characterized as placing more accountability on employees' shoulders (Alexander, 1991; Spector, Dwyer, & Jex, 1988). Employees might experience more stress and anxiety as they are held accountable for both their successes and failures – especially if those successes and failures have impacts that go beyond an employee's immediate job.

A fourth explanation for observed weak or negative relationships between empowerment practices and outcomes – and one addressed frequently and explicitly in the empowerment literature – is the notion that empowerment practices will not produce their expected outcomes unless employees psychologically experience empowerment. Psychological empowerment has been conceptually defined as a motivational construct manifested in four cognitions reflecting individuals' orientation to their work roles: meaning, competence, self-determination, and impact (Thomas & Velthouse, 1990). Spreitzer (1995) defined these four cognitions as follows: meaning refers to perceptions that workplace goals are aligned with personal goals, and it also suggests that employees care about their work (Brief & Nord, 1990; Hackman & Oldham, 1980; Thomas & Velthouse, 1990). Competence refers to feelings of situational self-efficacy or confidence in one's job performance capabilities (Bandura, 1986). Self-determination refers to feelings of control in making decisions in one's workplace (Bell & Staw, 1989; Deci, Connell, & Ryan, 1989; Spector, 1986). Impact refers to individuals' belief that they can make a difference at work and in influencing organizational outcomes (Ashforth, 1989). Spreitzer pointed out that impact is essentially different from locus of control because it is influenced by work context, whereas locus of control is a personality characteristic exhibited across different situations (albeit to varying degrees depending on the situation; Wolfe & Robertshaw, 1982).

Meaning, competence, self-determination, and impact are a set of situation-specific cognitions, rather than personality characteristics generalizable across situations, and thus, they reflect people's perceptions about themselves in relation to their work environments (Bandura, 1989; Thomas & Velthouse, 1990). Instead of focusing on objective characteristics of a work environment (structural empowerment), psychological empowerment focuses on the cognitive interpretation employees make of that environment (Spreitzer, 1995). It is posited as a



psychological state that individuals must experience for managerial interventions to be successful. As is the case with structural empowerment, the individual-level outcomes most commonly expected to result from psychological empowerment also include performance and job satisfaction (Spreitzer, 1996).

Psychological empowerment is a logical response to structural empowerment; it is the feeling resulting from being exposed to structural conditions of empowerment (Laschinger, Finegan, Shamian, & Wilk, 2003). As psychological empowerment is often described as equivalent to intrinsic motivation (Conger & Kanungo, 1988; Spreitzer, 1995), this notion also is consistent with the proposition that motivation mediates the relationship between empowerment practices and outcomes. In this connection, psychological empowerment often is conceptually positioned as a mediator between structural empowerment practices and both performance and satisfaction (Kirkman & Rosen, 1999; Laschinger et al., 2001; Spreitzer, 1996). Surprisingly, though, few studies have empirically examined psychological empowerment in this way (Maynard, Gilson, & Mathieu, 2012).

Some research, however, has examined the relationships of practices with psychological empowerment. Spreitzer (1996), for instance, found participative climate to be weakly related to psychological empowerment. In another example, Gagne, Senecal, and Koestner (1997) found autonomy (measured using the Job Diagnostic Survey; Hackman & Oldham, 1975) to be moderately to strongly related to various psychological empowerment dimensions, but the relationship was unexpectedly negative for competence. Given the dearth of studies empirically examining psychological empowerment as a mediator between empowerment practices and individual-level outcomes and the inconclusive results in those that do, the extent to which or

whether psychological empowerment truly does mediate remains open to debate. Alternative psychological mediators might serve as equally or more important mediators.

As is the case with structural empowerment, psychological empowerment theory and most empowerment research have primarily expected positive outcomes to result from psychological empowerment. Contrary to the structural empowerment literature, however, psychological empowerment research finds more consistent relationships between psychological empowerment and outcomes like job satisfaction and employee performance. A substantial body of research supports a positive relationship between psychological empowerment and job satisfaction, as well as between psychological empowerment and individual performance (Seibert et al., 2004; Thomas & Tymon, 1994). For instance, Huang, Iun, Liu, and Gong (2010) found psychological empowerment to be positively associated with task performance and organizationally-directed citizenship in a sample of managers. As another example, Wang and Lee (2009) likewise found psychological empowerment to be positively associated with job satisfaction.

Although psychological empowerment has been consistently related to satisfaction and performance, because structural empowerment has been inconsistently related to psychological empowerment, it may be reasonable to consider additional or alternative mediators of the structural empowerment-outcome relationship. Even though scholars conceptually recognize that psychological empowerment can mean different things to different people, empirical research nonetheless addresses only positively framed cognitions (viz., meaning, impact, self-determination, and competence). Cumulatively, the research regarding structural and psychological empowerment suggests employees will exhibit improved performance and higher levels of satisfaction when they are psychologically empowered. To the extent that structural

empowerment practices are appraised positively (i.e., employees experience psychological empowerment), empowerment likely plays out as typically expected. What remains unclear, however, is what happens if employees appraise structural empowerment practices negatively, or appraise them both positively and negatively. As discussed, employees might appraise structural empowerment negatively because it is associated with increased accountability and ambiguity (Morrell & Wilkinson, 2002; Wall, Cordery, & Clegg, 2002; Wang & Lee, 2009).

The potential for negative appraisal provides one explanation for why empowerment practices generally are only weakly related to performance and satisfaction (Blegen, 1993; Irvine & Evans, 1995; Laschinger, Finegan, Shamian, & Wilk, 2001), and sometimes only weakly related to psychological empowerment (Laschinger, Finegan, et al., 2001). If some employees appraise structural empowerment as positive, and others appraise it as negative, one might expect to find null or weak direct relationships between empowerment practices and psychological empowerment, performance, and satisfaction. Below I argue that one means of considering negative appraisals that is consistent with the arguments above is to examine whether felt stress mediates the relationship between empowerment practices and outcomes such as performance. I also argue that this approach suggests it is reasonable to consider additional outcomes, such as employee well-being.

### **Challenge/Hindrance Stress**

As noted in Chapter 1, despite the joint emphasis on control found in the empowerment and JD-C literatures, the transactional model may better help explain the circumstances under which empowerment fails to lead to improved performance and simultaneously leads to decreased employee well-being (i.e., greater strain). Specifically, the transactional model suggests employees either negatively or positively appraise objective workplace stressors (e.g.,

structural empowerment practices; Folkman et al., 1986). When employees appraise stressors negatively or as posing the threat of harm or loss, the stressors are more likely to produce negative outcomes – such as adverse psychological or physiological responses (Lazarus et al., 1985). On the other hand, when employees appraise stressors positively, or as offering the opportunity for gain and growth, the stressors may also produce positive outcomes such as active engagement in work (Simmons & Nelson, 2001). Building on the logic of the transactional model, scholars recently have suggested that workplace stress can be categorized as either challenge-related or hindrance-related (LePine et al., 2005). Although both forms can cause stress, they may be differentially associated with employee performance (Podsakoff, LePine, & LePine, 2007).

Challenge stress is labeled as such because it is believed to be experienced by employees as a challenge from which mastery, growth, and personal gains will result. The factors underlying challenge stress are those demands perceived by individuals as obstacles to be overcome to achieve and learn (Cavanaugh et al., 2000). Although the demands that are considered challenging may vary across employees, such demands are generally believed to result from high work load, time pressure, job scope, complexity, and responsibility (McCauley, Ruderman, Ohlott, & Morrow, 1994). Hindrance stress, which results from factors such as organizational politics, red tape, role ambiguity, dissensus, and interference, is believed to be experienced by employees as a personal threat or hindrance (Ivancevich, 1986; Ivancevich, Matteson, & Preston, 1982). These are believed to be perceived as undesirable constraints interfering with individuals' ability to achieve personal goals. Because both challenge stress and hindrance stress are believed to represent increased demands on employees, both are expected to reduce well-being. Nonetheless, because challenge stress is perceived as having the potential to

promote personal gain or personal growth, it is expected to trigger positive emotions and positive ways of coping, such as through increased motivation (LePine et al., 2005). Hindrance stress, on the other hand, may trigger negative emotions and negative ways of coping.

Viewing challenge stress as a potential source of motivation is consistent with the notion that positive appraisals mediate the relationship between structural empowerment and employee performance. That is, structural empowerment is typically conceptualized as motivating employees and, ultimately, improving their performance through its role in fulfilling their needs for autonomy, complex and interesting work, and greater responsibility. Similarly, challenge stress is expected to arise from the experience of these same factors, which are conceptualized in the stress literature as challenges rather than needs. In turn, the desire to overcome these challenges is expected to motivate employees to work harder (LePine et al., 2005). Alternatively, hindrance stress is expected and has been found to be negatively associated with individual performance (Cavanaugh et al., 2000; LePine et al., 2005; Podsakoff et al., 2007). Although empowerment practices have not been explicitly hypothesized to produce the negative perceptions associated with hindrance stress, researchers acknowledge that some employees find empowerment to be threatening (Morrell & Wilkinson, 2002; Wall et al., 2002). It is possible that, in such instances, structural empowerment might produce the negative cognitions associated with hindrance stress and, thus, lead to poorer performance.

In studies supporting the expected effects of challenge and hindrance stress, it is apparent that, consistent with the transactional model, individuals appraise the objective environment and factors within it as either challenging or hindering. It has been acknowledged that responses may vary depending on individual differences that influence the way people appraise and cope with stressors (Lazarus & Folkman, 1984). This notion implies the experience of challenge and

hindrance stress can be conceptualized as a process in which cognitive appraisals serve as mediators between workplace stressors, such as organizational practices, and responses, such as increased effort, positive attitudes, and general well-being (Folkman et al., 1986; Lazarus & Folkman, 1984). Cognitive appraisal is the process of evaluating or “categorizing an encounter, and its various facets, with respect to its significance for well-being” (Lazarus & Folkman, 1984: 31).

Because empowerment practices are intended to provide employees with more authority over how their work is done, more access to relevant information, additional support and resources necessary to perform, and the discretion to act on one’s own, employees will likely appraise those practices as beneficial challenges. Associated challenges, such as high workloads, time pressure, and high responsibility, are thought to be obstacles to be overcome to learn and achieve (Cavanaugh et al., 2000). Simultaneously, however, these same practices might present employees with obstacles that will likely be appraised as hindrances. For example, practices designed to empower employees can expose them to more role ambiguity because employee latitude will extend beyond immediate job responsibilities. Empowerment practices might also expose employees to red tape, politics, and dissensus, as they attempt to act on their self-determination or as they interact with a broader range of others than they do when acting in a more limited fashion. Because of the greater accountability that is often associated with empowerment practices, employees might also experience more threat to their job security and greater performance anxiety (LePine et al., 2005).

I propose that challenge and hindrance stress mediate the relationships between structural empowerment practices and employee performance and well-being. It is expected that empowerment practices can lead to feelings of both challenge and hindrance stress in a given

individual. Challenge stress as a mediator is consistent with the motivational logic commonly used to explain potential positive performance outcomes from structural empowerment.

Hindrance stress addresses the possibility that structural empowerment will not be uniformly positively appraised by employees. When empowerment practices primarily produce feelings of challenge, performance gains are expected to occur. When empowerment practices primarily produce feelings of hindrance, performance may be hurt. Whereas structural empowerment is expected to be positively and indirectly associated with performance only through its relationship with challenge stress, structural empowerment is expected to be negatively associated with well-being through employees' appraisals of both challenge and hindrance stress.

Hypothesis 1: Challenge stress will mediate the relationships of structural empowerment with task performance and well-being. It will transmit a (a) positive relationship with task performance and (b) negative relationship with well-being.

Hypothesis 2: Hindrance stress will mediate the relationships of structural empowerment with task performance and well-being. It will transmit negative relationships with both (a) task performance and (b) well-being.

### **The Moderating Role of Personality Characteristics**

Attribution theorists propose that “the result of an action is felt to depend on two sets of conditions, namely, factors within the person and factors within the environment” (Heider, 1958: 82). Thus far, I have argued that individuals can appraise structural empowerment practices as both challenge and hindrance stressors. My arguments have considered the environment that shapes employee challenge and hindrance stress appraisal, but they have not yet considered the role of personal or individual differences in the appraisal process. Yet, some have suggested that individual differences play a role in explaining why some employees might be more inclined to

appraise empowerment practices positively and others more likely to negatively appraise the same practices (Landeweerd & Boumans, 1994; Strain, 1999; Wageman, 1995). In this section, I examine how personality characteristics may moderate the relationship between empowerment practices and perceptions of challenge and hindrance stress. Specific moderators considered are: proactive personality, locus of control, generalized self-efficacy, and generalized self-esteem. Of these, the latter three have been treated in the past as aspects of core self-evaluation (Judge, Locke, Durham, & Kluger, 1998). These moderators were selected for two reasons.

First, they are consistent with the emphasis in both the empowerment and transactional literatures on personal resources and capability. The logic of the empowerment literature is that the conditions created by empowerment practices are desired by and, thus, motivate employees because the practices give them opportunities to use their personal resources and capabilities in meaningful ways (Spreitzer, 1995). This logic, however, assumes employees actually have the resources and capabilities required by the empowerment practices (e.g., a desire for and ability to engage in self-determined behaviors that have important implications, confidence in their ability to handle greater responsibility and accountability). In the transactional literature, the results of the appraisal process are expected to be a function of whether an individual can effectively deal with or manage the aspect of the environment that is being appraised – that is, has the necessary resources and capabilities. Lazarus and Folkman argue that, personality characteristics can be a source for such resources and that characteristics related to “one’s mastery over the environment may have significant effects on threat or challenge appraisals” (1984: 65).

Second, related to the points above, all of these moderators can be conceptually linked to a key notion of empowerment, that of active engagement and personal initiative. Each of the moderators also has a conceptual link with employee motivation and performance. For instance,



people with proactive personalities are described as having a dispositional tendency to show initiative and take action (Bateman & Crant, 1993). Those with an internal locus of control are described as believing they have influence over life events and are willing to take on challenges (Rotter, 1966). As is traditionally expected with employees working in an empowering environment, both proactive and internally controlled employees are ultimately expected to perform better than those who are not (e.g., Bernardi, 1997; Seibert, Kraimer, & Crant, 2001). Similarly, generalized efficacy and generalized esteem also are linked to empowerment through motivational concepts. For instance, research suggests employees with low self-esteem generally rely more on their supervisors in performing their jobs (i.e., are less empowered; Pierce, Gardner, Dunham, & Cummings, 1993). According to the logic of expectancy theory, employees with lower esteem and efficacy are less likely to believe themselves capable of performing at the levels required to reap any personal gain (LePine et al., 2005).

### Proactive Personality

Proactive personality has been introduced empirically as a stable dispositional construct representing the extent to which individuals take action to change their environment. As defined by Bateman and Crant (1993: 105), an employee with proactive personality “is one who is relatively unconstrained by situational forces, and who effects environmental change. Other people, who would not be so classified, are relatively passive – they react to, adapt to, and are shaped by their environments. Proactive people scan for opportunities, show initiative, take action, and persevere until they reach closure by bringing about change.”

Not all individuals naturally react to their environment in proactive ways; passive employees are expected to be less likely to try to reduce job demands (Bateman & Crant, 1993; Parker & Sprigg, 1999). Rather, they tend to endure such demands, and thus, also must endure

any negative outcomes from those demands. Parker and Sprigg (1999) found that proactive employees take steps to manage work demands and channel their energy in a constructive way, thus minimizing strain. Karasek (1997: 34) has suggested that proactive employees with stressful jobs will experience only average psychological strain because “much of the energy aroused by [a] job’s many stressors (challenges) are translated into direct action – effective problem solving – with little residual strain to cause disturbance.” Based on this logic, I argue that those with a proactive personality will be more likely to appraise the demands posed by empowerment practices as an obstacle to overcome rather than as a personal threat, because they are more likely to believe that they can change the obstacles they encounter. As individuals who tend to show initiative and take action (Bateman & Crant, 1993), those who are high in proactive personality may be more inclined to believe that something can be done to alter negative circumstances, and they may react to such circumstances, by using a problem-solving style of coping (de Rijk, Le Blanc, Schaufeli, & de Jonge, 1998). Alternatively, those who are low in proactive personality, and thus more passive in response to their environments, might be more likely to appraise an undesirable situation as threatening because they think they must accept it as it is (Folkman et al., 1986; Perrewe & Zellars, 1999).

Hypothesis 3a: The positive relationship between structural empowerment and felt challenge stress will be stronger for more proactive individuals than for less proactive individuals.

Hypothesis 3b: The positive relationship between structural empowerment and felt hindrance stress will be weaker for more proactive individuals than for less proactive individuals.

## Locus of Control

Research on locus of control suggests people tend to attribute the causes of their successes or failures to internal or external sources. Individuals vary in their beliefs regarding their ability to control life events. Those who attribute success or failure to themselves are referred to as internals, or individuals with an internal locus of control. Those who attribute success or failure to external sources are referred to as externals, or people with an external locus of control (Rotter, 1966). Research shows that internals have greater intrinsic motivation and are more achievement oriented than externals (Renn & Vandenberg, 1991; Spector, 1982).

Previous research has identified locus of control as a key moderator of the relationships between various environmental stimuli and employee stress (Ganster & Schaubroeck, 1991b; Kahn & Byosiere, 1992). In a workplace setting, an individual's control over stressful situations is to some extent influenced by the normative practices that are in place (Marino & White, 1985). Empowerment practices, for example, might increase control by allowing employees self-determination over their work. Internally controlled persons generally hold the belief that their own actions are the causes of everyday-life outcomes, whereas externally controlled persons hold the generalized belief that external sources such as chance, fate, or other sources are responsible for events that occur in their lives (Rotter, 1966). When one's belief about the location of control and whether or not they have the freedom to take actions are incongruent, stress is expected to result (Houston, 1972). In most cases, internals will be less likely to experience stress when faced with a problem, provided they believe environmental characteristics do not constrain their opportunities to actively cope with the problem. On the other hand, when internals do not believe anything can be done to change or avoid a stressful condition, conditions are incongruent with their beliefs that they are in control, and they will

experience greater stress as a result. Individuals with an external locus of control should experience more stress when they are given greater control over a stressful situation (Marino & White, 1985). Empowerment practices give internals the control they need to overcome obstacles. For internals, structural empowerment creates a situation that is consistent with their personalities – thus augmenting feelings of challenge. For externals, structural empowerment practices create situations that are inconsistent with their personalities, thereby enhancing feelings of hindrance.

Individuals with an internal locus of control are said to be able to influence events in their lives, demonstrate willingness to take on challenges (Rotter, 1966), and also accept responsibility for the outcomes of life events (Davis & Davis, 1972). This logic suggests they would not hesitate to take on challenges resulting from empowerment practices. Individuals with an external locus of control, on the other hand, blame external sources for their failures because they believe outcomes are not related to their actions, might be reluctant to take on such challenges, and could even see them as threatening (Phares, Wilson, & Klyver, 1971; Rotter, 1966). Research suggests that individuals with internal locus of control experience lower anxiety (Jones & Page, 1986) and that internal locus of control could function as a filter for stress (Daniels & Guppy, 1992). This serves as a possible explanation why externals might be more inclined to experience hindrance stress as a result of empowerment practices, whereas internals might be more likely to experience challenge stress (Vitaliano, Russo, & Maiuro, 1987).

Hypothesis 4a: The positive relationship between structural empowerment and felt challenge stress will be stronger for internal locus of control individuals (internals) than for external locus of control individuals (externals).

Hypothesis 4b: The positive relationship between structural empowerment and felt hindrance stress will be stronger for external locus of control individuals than for internal locus of control individuals.

### Generalized Self-Efficacy

Bandura (1997: 2) defined generalized self-efficacy as “beliefs in one’s capabilities to organize and execute the courses of action required to manage prospective situations.” Contrary to the competency or self-efficacy measure found in Spreitzer’s (1995) research, which is situation specific, generalized self-efficacy is trait specific. As described by Judge, Locke, and Durham (1997: 19), generalized self-efficacy is “one’s estimates of one’s capabilities to mobilize the motivation, cognitive resources, and courses of action needed to exercise general control over events in one’s life.” Self-efficacy in its generalized form is an evaluation of how well a person can perform on average across a variety of task-specific situations (Locke, McClellan, & Knight, 1996).

Compared to those with low self-efficacy, individuals with high self-efficacy are confident about their ability to accomplish goals and make changes. They are also less likely than low self-efficacy individuals to experience distress and anxiety if they are forced to exercise control when they feel incapable or unprepared (Litt, 1988). In contrast, evidence shows that employees who have lower control and face difficult situations may experience less stress when they have low self-efficacy (Schaubroeck & Merritt, 1997). This is because low self-efficacy enables them to make situational attributions for difficulties and possible failure, instead of making self-directed attributions (Fisher, 1984). Empowerment practices should only reduce felt hindrance stress and increase felt challenge stress when individuals have a high level of confidence in their ability to face any demands. Compared to individuals with high self-efficacy,

people with low self-efficacy may suffer more distress and anxiety after personal control is increased through empowerment (Schaubroeck & Merritt, 1997). Weick (1988) confirmed that, when dealing with a stressful situation, employees with higher competence will be less defensive and will exert more effort to seek opportunities to overcome challenges rather than merely react to the situation. Feelings of competence affect individuals' willingness to overcome obstacles and to face negative experiences (Bandura, 1989; Spreitzer, 1995). When individuals feel competent about their own capability, it provides them with the self-confidence needed to take risks. It is posited, therefore, that the relationship between structural empowerment and challenge stress will be strengthened when employees experience higher self-efficacy. Alternatively, the relationship between structural empowerment and hindrance stress will be weakened for these same individuals.

Hypothesis 5a: The positive relationship between structural empowerment and felt challenge stress will be stronger for individuals who are high in generalized self-efficacy than for individuals who are low in generalized self-efficacy.

Hypothesis 5b: The positive relationship between structural empowerment and felt hindrance stress will be weaker for individuals who are high in generalized self-efficacy than for individuals who are low in generalized self-efficacy.

### Generalized Self-Esteem

Self-esteem is defined by Brockner (1988) as a general feeling of self-worth. Compared to those with low self-esteem, individuals with high self-esteem have feelings of positive self-worth and are likely to have a work-specific sense of competence (Bandura, 1977). Employees with high self-esteem believe they have valued resources and talents worth contributing and, therefore, are more likely to be active contributors at work (Gist & Mitchell, 1992). Research has

identified self-esteem as a key moderator of the relationships between environmental stimuli and employee stress (Ganster & Schaubroeck, 1991b; Kahn & Byosiere, 1992). Evidence shows that individuals with low self-esteem tend to rely more on their supervisory support and help from their peers to perform their jobs, whereas individuals with high self-esteem tend to rely more on personal skills (Pierce et al., 1993). For low-self-esteem individuals, there will be a stronger association between perceived supervisor power and decreased stress.

Kahn and Byosiere (1992) suggested that self-esteem affects how employees cope with stressful situations and the ways they appraise situations in a work environment. Individuals with low self-esteem are more adversely affected by workplace stressors, compared to those with high self-esteem. They are also less likely to actively seek ways to mitigate the negative effects from stressors because of their low self-confidence in coping with such situations (Ganster & Schaubroeck, 1991a). Those with low self-esteem consistently experience lower stress when they believe their superiors are more powerful and have more influence on the job. High-esteemed individuals experience lower stress when they believe they have power and influence to make changes at work. Low-self-esteem employees have the tendency to be more dependent on external information and support, whereas high-self-esteem employees tend to be less dependent on such information and support (Brockner, 1988; Ganster & Schaubroeck, 1991b; Kahn & Byosiere, 1992).

Because people with lower self-esteem are more uncertain about their work attitudes and behavior when compared to individuals with higher self-esteem, their need for approval from their supervisors and the motivation to imitate other's behaviors are greater (Brockner, 1988). Research suggests that low self-esteem individuals are more susceptible to certain stressors, including role ambiguity and uncertainties (Brockner, 1988; Ganster & Schaubroeck, 1991a;

Mossholder, Bedeian, & Armenakis, 1982). High self-esteem individuals are less susceptible to such stressors. This susceptibility leads to higher dependency on supervisory support. Because increased support from superiors helps reduce ambiguity in the work environment, low self-esteem individuals are more likely to perceive supervisor power as a factor that helps reduce stress, rather than as a source of stress (Elangovan & Xie, 1999). When high-self-esteem employees are confronted with increased autonomy, more delegated tasks, and increased responsibility, their perceptions of self-worth should increase the likelihood that they will experience challenge stress, and it should buffer against the experience of hindrance stress. When low-self-esteem employees are confronted with the same tasks, such structural conditions may produce only weak relationships with the experience of challenge stress, but strong relationships with hindrance stress.

Hypothesis 6a: The positive relationship between structural empowerment and felt challenge stress will be stronger for individuals with more generalized self-esteem than for individuals with less generalized self-esteem.

Hypothesis 6b: The positive relationship between structural empowerment and felt hindrance stress will be weaker for individuals with more generalized self-esteem than for individuals with less generalized self-esteem.

### **Summary**

This dissertation contributes to the empowerment literature in multiple ways. For instance, because the psychological empowerment literature focuses on only desirable organizational cognitions and perceptions, it does not consider the possibility that different employees may appraise the same structural empowerment practices in different ways. Therefore, these practices may not result in uniformly positive cognitions across an entire



workforce. Knowledge about the circumstances under which empowerment practices are experienced negatively will help researchers and practitioners better understand how to use empowerment practices to their full potential. This dissertation contributes such knowledge by examining whether and how structural empowerment is associated with perceptions of challenge and hindrance stress and the relationship between those kinds of stress and both employee performance and well-being. In addition to examining the structural characteristics that influence employee challenge and hindrance stress appraisal, the proposed dissertation will also consider the role of the person in the appraisal process and how personality characteristics (proactive personality, locus of control, generalized self-efficacy, and generalized self-esteem) might moderate the relationships between empowerment practices and the ways employees appraise those practices as either challenging or hindering. In the following chapter I outline the dissertation's methodology, as well as offer descriptions of the sampling procedure and statistical analyses used to test the above hypotheses.

## **CHAPTER THREE: METHODS**

In this chapter, I discuss the sample selection, data collection procedures, and the measures used for testing the hypotheses presented in Chapter 2.

### **Sample and Procedure**

The StudyResponse Project at the School of Information Studies at Syracuse University was contracted to recruit a sample and administer the survey instruments. StudyResponse is an online service that connects academic researchers with individuals (panelists) from a variety of occupations and organizations who have registered with StudyResponse specifically for the purpose of participating in online research. Although collecting data from individuals in multiple organizations potentially adds confounds resulting from differences in work characteristics not measured in this study, it can also increase the generalizability of results if they are found to hold true across a variety of different organizations and industries. StudyResponse has hosted a wide variety of research projects in the United States, United Kingdom, Canada, and Australia, and it has been approved by Syracuse University's Institutional Review Board (IRB). A StudyResponse requirement is that respondents be offered a \$5 electronic gift certificate for every survey he/she completes. Respondents were only allowed to complete any given survey once, but as described below, employee respondents were asked to complete a total of two different surveys (supervisor respondents were asked to complete only a single survey). Although research indicates that providing financial incentives to respondents typically improves response rates, such incentives appear to have little influence (positive or negative) on the amount of effort respondents devote to answering close-ended questions (Teisl, Roe, & Vayda, 2005). Research further indicates that participants in online research access panels (i.e., such as those participating in Study Response) who complete the initial wave in a multi-survey study

will be more likely to also complete the succeeding waves when a cash incentive is provided (Görizt, Wolff, & Goldstein, 2008).

To be eligible for this study, respondents had to be working adults in the United States or Canada who were employed outside the home for at least 30 hours per week on average at the time of the study, not self-employed, and who had immediate supervisors. Prescreening was used to determine whether registered panelists met these qualifications. StudyResponse sent a pre-screening instrument (which included a description of the study and questions pertaining to the study requirements listed above) to over a thousand randomly selected panelists whose registration information indicated they were employed full-time and living in the U.S. or Canada. StudyResponse opened the screening to a large set of invitees because, understandably, not everyone is willing to invite their supervisors to participate or to provide supervisor information. Based on responses to the pre-screening instrument, a total of 262 panelists who indicated they met all study requirements and were interested in being involved in this study were contacted to participate in the first subordinate survey.

These panelists were asked to complete a total of two on-line surveys conducted approximately one to two weeks apart. Although Podsakoff, MacKenzie, and Podsakoff (2012) note that it is difficult to determine the optimal length of temporal separation, my goal was to sufficiently separate the two waves of subordinate surveys such that responses to the second survey would not be influenced by responses to the first; yet, not so much temporal separation as to unduly weaken the relationships between the focal variables (e.g., because changes in the empowerment practices occurred after they were measured but before psychological empowerment was measured). Additionally, respondents were asked to provide the name and email address of their immediate supervisor. Surveys were sent to supervisors at the same time

the second survey was sent to employee respondents, and the supervisors were also eligible for a \$5 electronic gift certificate for completing the supervisor survey. Temporally separating collection of predictor and criterion variables and collecting data from multiple respondents are recommended strategies for reducing common-method variance (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003).

The first subordinate survey included items measuring both empowerment practices and respondents' personality characteristics (viz., participation, delegation, accountability, proactive personality, locus of control, generalized self-efficacy, and generalized self-esteem).

Demographics were also collected in this initial survey, and respondents were asked to provide contact information for their immediate supervisors. Measures of challenge stress, hindrance stress, and psychological empowerment (which will be treated as a control variable, see below) were administered in a second survey. Respondents were also asked to provide self-ratings of their well-being (which was measured in terms of anxiety and somatic symptoms) in a second survey. Using the contact information provided by the initial subordinate survey, a survey was sent to each respondent's immediate supervisor to obtain ratings of the employees' task performance.

For each survey, a reminder was sent to non-responders approximately one week after the survey was initially posted. All respondents were informed that individual-level data would be accessible to only the researcher and her dissertation chair and that only aggregate data would be reported in any ensuing presentation or publication. Respondents were also told that they would not have access to their supervisors' responses; nor would their supervisors have access to their responses.

## Measures

Unless otherwise noted, all measures were anchored on a five-point response continuum (1 = *strongly disagree* to 5 = *strongly agree*) and were coded such that a higher score indicates a greater degree of the given construct (e.g., a higher degree of participation). All measures are reproduced in Appendix 1.

Participation and delegation. Participation ( $\alpha = .94$ ) and delegation ( $\alpha = .94$ ) were gauged using measures developed by Richardson and Taylor (2011) and previously tested in samples of full-time employees. Each measure consists of six items that tap how frequently a supervisor asks a subordinate to participate in decisions or delegates decisions to the subordinate. For participation, respondents are presented with a brief definition of participation and asked how often they are requested to participate in specific kinds of decisions. Similarly, for delegation, respondents are presented with a definition of delegation followed by items regarding how frequently the same kinds of decisions are delegated by their supervisor. Sample items are: “How frequently does your supervisor ask you to participate when making decisions about what your personal job tasks should be?” or “How frequently does your supervisor delegate to you decisions about what your personal job tasks should be?” Items are on a five-point response scale ranging from 1 = *never* to 5 = *everyday or almost everyday*.

Accountability. Eight items developed by Hochwarter, Kacmar, and Ferris (2003) and taken from Hall, Royle, Brymer, Perrewe, Ferris, & Hochwarter (2006) were used to tap accountability ( $\alpha = .72$ ). Sample items include “I am held very accountable for my actions at work” and “I often have to explain why I do certain things at work.”

Proactive personality. Proactive personality was gauged with a self-report 17-item measure (Bateman & Crant, 1993). Scores on this measure exhibited a high level of reliability,

with coefficient alpha = 0.92. Representative items are “I am constantly on the lookout for new ways to improve my life” and “I feel driven to make a difference in my community, and maybe the world.”

Locus of control. An 11-item Internal-External (I-E) measure developed by Ghorpade, Hattrup, and Lackritz (1999) was used to gauge general locus of control. This measure taps individuals’ perceptions of whether they themselves or external factors influence outcomes in their lives. Scores in this measure exhibited high reliability ( $\alpha = .93$ ). Sample items include “I have usually found that what is going to happen will happen, regardless of my actions” and “Many times I feel that we might just as well make many of our decisions by flipping a coin.” All items are reverse-coded such that high scores indicate an internal locus of control and low scores indicate an external locus of control.

Generalized self-efficacy. Generalized self-efficacy (GSE) was gauged with eight items developed by Chen, Gully, and Eden (2001). The NGSE (New General Self-efficacy) measure was chosen based on the results of a study that compared three GSE instruments (Scherbaum, Cohen-Charash, & Kern, 2006). The study reported that the GSE measure developed by Chen et al. (2001) outperformed alternative measures in many aspects, including item discrimination, item information, and relative efficiency. The reliability for scores in this measure was .88. Example items include “I will be able to achieve most of the goals that I have set for myself” and “When facing difficult tasks, I am certain that I will accomplish them.”

Generalized self-esteem. Rosenberg’s (1965, 1989) 10-item self-esteem measure was used to gauge generalized self-esteem. The reliability for scores in this measure was .86. Sample items include “I feel that I am a person of worth, at least on an equal plane with others” and “I feel that I have a number of good qualities.”

Challenge and Hindrance Stress. Challenge stress was gauged with six items developed by Cavanaugh et al. (2000), and hindrance stress was gauged with five items from the same study. The score reliabilities for challenge and hindrance stress were  $\alpha = .95$  and  $.92$ , respectively. Respondents were asked to indicate how much stress is caused by the work characteristics referenced in each item. Responses were captured on a 5-point scale ranging from *produces no stress* (=1) to *produces a great deal of stress* (=5). Representative items are “The number of projects and or assignments I have” (challenge stress) and “The inability to clearly understand what is expected of me on the job” (hindrance stress).

Anxiety. Anxiety was measured using five items developed by Parker and Decotiis (1983). The coefficient alpha reliability in the sample reported in the current study was  $.87$ . Sample items are “I have felt fidgety or nervous as a result of my job” and “My job gets to me more than it should.” Items were coded such that higher values represent greater anxiety or, in other words, poorer well-being than lower values.

Somatic Symptoms. Somatic symptoms were measured using 10 items ( $\alpha = .96$ ) taken from Richardson, Yang, Vandenberg, Dejoy, and Wilson (2008). Sample items are preceded by this question “How often have you experienced any of the following during the past month?” Items include “You were bothered by a headache” and “You felt as if blood were rushing to your head.” Responses were captured on a 5-point scale (1 = *never*; 5 = *very often*). On this rating scale, high scores as indicate that somatic symptoms are frequently experienced and, thus, that respondents likewise experience reduced well-being.

Performance. Performance was gauged with seven items taken from Williams and Anderson (1991). Scores in this measure exhibited an alpha coefficient of  $.82$ . Respondents’ immediate supervisors were instructed to indicate the extent to which they agreed or disagreed

with statements such as, “This worker adequately complete(s) assigned duties” and “This worker fulfill(s) responsibilities specified in his/her job description.”

Control variables. In addition to the preceding measures, psychological empowerment, gender, age, and organization tenure were included as controls in all analyses. Psychological empowerment was included as a control because, as described in Chapter 2, previous research suggests it is positively related to task performance (Maynard et al., 2012; Seibert et al., 2004; Spreitzer et al., 1997). It is my expectation that challenge and hindrance stress will account for additional variance in task performance beyond that accounted for by psychological empowerment. Psychological empowerment was measured with 12 items ( $\alpha = .89$ ) developed by Spreitzer (1995) to capture all four psychological empowerment dimensions (viz., meaning, competence, self-determination, and impact). Sample items include “The work I do is very important to me” (Meaning), “I am confident about my ability to do my job” (Competence), “I have significant autonomy in determining how I do my job” (Self-determination), and “My impact on what happens in my unit is large” (Impact).

Regarding demographic controls, previous research has found that men and women differ in reported frequency and severity of stress (Spielberger & Reheiser, 1994). Gender may also be a factor in appraising job stressors and stress symptoms (Murphy, Beaton, Cain, & Pike, 1995). Nelson and Quick (1985) concluded that women typically experience greater job stress because they face lower salaries, discrimination, stereotyping, and the challenge of balancing family and work. In addition to age and gender, organization tenure has also been found to be associated with higher levels of performance (Hesketh, 1993), and role stress (Stamper & Johlke, 2003). Thus, respondents’ organization tenure was controlled in the regression analysis (described



below) in terms of the number of years respondents have worked for their employing organization.

## CHAPTER FOUR: ANALYSES AND RESULTS

Of the 262 StudyResponse panelists invited to participate in this study, 246 (93.89%) completed the first subordinate survey and provided supervisor contact information. The second subordinate survey was sent to these 246 respondents approximately two weeks later, and a separate survey was sent to their supervisors at the same time. The second subordinate survey was completed by 240 (97.56% of 246) respondents. A total of 231 (93.90% of 246) supervisors responded to the supervisor survey.

Among the benefits of Internet data collection is that it allows for rapid deployment and response, and it produces readily tabulated data. There are, however, legitimate concerns about Internet-based research as well, such as the integrity of the data collected (Meade & Craig, 2012). Data from the matched full sample were thoroughly examined for evidence of inappropriate or careless responses. Although the 262 panelists invited to participate in the study were prescreened, anyone in the first subordinate survey who reported on the demographic questions, that they worked less than 30 hours per week on average, were less than 18 years of age, or resided outside of the United States or Canada were removed from the sample.

Despite providing unique links to each survey that purportedly could not be re-used after a particular survey had been completed by a given respondent, a small number of respondents ( $n = 28$ ) nonetheless completed one or more of the surveys multiple times. Review of these duplicate responses indicated that 17 were associated with identical IP addresses. Unfortunately, it is impossible to determine exactly why some respondents were able to complete multiple surveys despite the alleged safeguards against such occurrence. According to Qualtrics support (Qualtrics is the program used to create the surveys), when surveys are administered by a separate party (i.e., through StudyResponse, rather than through Qualtrics directly) it is possible to

work around measures designed to prevent multiple responses. If after completing the survey the first time, the browser's cookies and cache on a respondent's computer are cleared, and a respondent uses a different browser on the same network, or uses a different computer on the same network, a survey could be completed by the same person on multiple occasions. For duplicate identification numbers coming from unique IP addresses, a further possible explanation is that the respondents incorrectly entered their identifiers, inadvertently providing a number that was identical to that of another respondent. This explanation is likely for some of the duplication observed in the supervisor survey, as the supervisors were given sequential identification numbers (many of which varied by no more than a single digit). The 28 respondents who completed the survey multiple times were removed from the sample.

Some respondents ( $n = 5$ ) answered all items in a given survey (including demographic questions and a question asking respondents to enter their job titles) with the same numeric value (e.g., all 5's). Respondents falling into these latter two categories were also removed from the sample. Similarly, one or more "instructed response items" (e.g., "Please answer 'agree' for this item"; Meade & Craig, 2012) were included in each survey. Following Meade and Craig's (2012) recommendations, anyone who responded incorrectly to one of these items was removed from the sample.

Because StudyResponse does not allow researchers access to participants' emails or other directly identifying information, it was impossible to verify that those completing the supervisor surveys were actually the immediate supervisors of the employee respondents. Inability to fully confirm that surveys are completed by the correct respondents is a problem existing with any survey administration and any sample, but even anonymous online surveys provide limited (albeit not foolproof) means of authenticating supervisor responses. Comparison of the

employees' and supervisors' unique StudyResponse identification numbers and the IP addresses of the computers used to complete the surveys indicated there were no employees or supervisors who provided identical identification numbers or IP addresses.

The data cleaning process and the removal of respondents with missing data produced a final usable sample of 144 respondents (54.96% of the original 262 invited to participate) who completed both subordinate surveys and had matched supervisor data. Table 1 provides a more complete description of these respondents and their supervisors. Table 2 provides the frequencies of each job classification. The majority of subordinate respondents in the usable sample was

Table 1  
Sample Characteristics

	Employees		Supervisors	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Age (Years)	39.58	9.28	45.21	10.67
Organization tenure (years)	8.56	5.71	12.61	8.38
Work tenure (years)	17.65	10.05	22.99	11.62
Position tenure (years)	6.06	4.22	9.24	7.32
Relationship tenure (years)	5.79	4.69		
Average hours worked per week	41.07	5.66		
U.S. Residency (%)				
Living in the U.S.		97.9		
Living in Canada		0.7		
No response		1.4		
Gender (%)				
Male (1)		55.6		61.1
Female (2)		44.4		36.1
No response		0		2.8
Race (%)				
White		79.2		88.9
Non-white		20.3		11.1
No response		0.7		0

Note. *n*=144

male (55.6%) and white (79.2%). The subordinates had a mean age of 39.58 years, had worked for their organization 8.56 years on average, and had worked with their present supervisors for 5.79 years on average. The majority of supervisors was also male (61.1%) and white (88.9%). As might be expected, the average age of the supervisors ( $M = 45.21$  years) was slightly older than

Table 2  
Job Classifications

	Subordinates		Supervisors	
	Frequency	%	Frequency	%
1. Architecture and engineering	6	4.2	6	4.2
2. Arts, design, entertainment, sports, and media	3	2.1	2	1.4
3. Building and grounds cleaning and maintenance	0	0.0	3	2.1
4. Business and financial operations	14	9.7	19	13.2
5. Community and social services	0	0.0	1	0.7
6. Computer and mathematical	21	14.6	13	9.0
7. Construction and extraction	5	3.5	6	4.2
8. Education, training, and library	7	4.9	9	6.3
9. Farming, fishing, and forestry	2	1.4	2	1.4
10. Food preparation and serving related	1	0.7	1	0.7
11. Healthcare practitioners and technicians	3	2.1	4	2.8
12. Healthcare support	3	2.1	2	1.4
13. Installation, maintenance, and repair	4	2.8	0	0.0
14. Legal	4	2.8	6	4.2
15. Life, physical, and social science	2	1.4	1	0.7
16. Management	26	18.1	24	16.7
17. Military specific	1	0.7	0	0.0
18. Office and administrative support	10	6.9	10	6.9
19. Personal care and service	5	3.5	2	1.4
20. Production	8	5.6	19	13.2
21. Protective service	1	0.7	0	0.0
22. Sales and related	9	6.3	8	5.6
23. Transportation and material moving	7	4.9	6	4.2
No response	2	1.4	0	0.0

Note.  $n=144$

that of their subordinates, and they had worked for the organization ( $M = 12.61$  years) slightly longer than their subordinates, on average. Respondents reported working in a diverse range of fields and professions. Management was the modal field reported by both subordinates (18.1%) and supervisors (16.7%). As shown in Table 2, there is some incongruence in the fields reported by subordinates and supervisors. For instance, one subordinate reported working in a military specific field, but surprisingly, no supervisors reported working in the same field. Although it is impossible to trace the cause of these inconsistencies, one possible explanation is that some subordinates interpreted the broad job classifications provided as response options differently from their supervisors and vice versa. Random error in selecting a response for this question is an additional potential explanation.

### **Tests of Construct Validity**

Three approaches were used to assess the construct validity of the measures included in this study. First, I used AMOS 20 to estimate separate confirmatory measurement models for the subordinate-rated and supervisor-rated constructs. Measurement model validity is dependent on model fit and evidence of individual construct validity. Model fit was determined using Pearson's chi-square goodness-of-fit test, the root mean square error of approximation (RMSEA), Tucker-Lewis index (TLI), and comparative fit index (CFI). RMSEA values less than .10 and CFI and NFI values greater than .90 are indicative of acceptable fit (Hair, Black, Babin, & Anderson, 2009). Using multiple fit statistics, such as an absolute fit index (RMSEA), an incremental fit index (TLI and CFI), and the  $\chi^2$  goodness-of-fit statistic, satisfies Hair et al.'s (2009) rule of thumb that both a badness-of-fit index (RMSEA) and a goodness-of-fit index be evaluated.

Because it is simpler (i.e., it includes only a single construct: task performance), I begin with discussion of the supervisor-rated measurement model. As shown in Table 3a, initial estimation of this model resulted in unacceptable fit ( $\chi^2 [14] = 165.71$ ; RMSEA = .27; TLI = .68; CFI = .79). Inspection of the parameter estimates indicated that the fifth item (see Appendix 1) had an extremely low factor loading ( $\lambda = .27$ ). The sixth and seventh items exhibited factor loadings ( $\lambda = .50$  and  $.59$ , respectively) that barely met Hair et al.'s (2009) recommendation that standardized loading estimates should be  $.50$  or higher (with loadings exceeding  $.70$  considered ideal). In addition, modification indices revealed that the sixth and seventh items had very highly correlated error terms. The latter is not necessarily surprising given that these two items were the only negatively worded items included in this construct, and the presence of such items has been found to affect the psychometric properties of measures (Schmitt & Stults, 1985; Schriesheim & Hill, 1981). Removing items 5, 6, and 7 from the measurement model resulted in acceptable fit to the data ( $\chi^2 [2] = 6.16$ ; RMSEA = .12; TLI = .97; CFI = .99). In the latter model, all factor loadings were significant and greater than  $.80$ . Only the first four items of the supervisor-rated task performance measure were retained in subsequent analyses.

Table 3a  
Fit Statistics for Supervisor-rated Measurement Models

	No. of constructs	$\chi^2$	<i>df</i>	RMSEA	TLI	CFI	$\Delta\chi^2$	$\Delta df$
Model 1	1	165.71	14	0.27	0.68	0.79		
Model 2	1	6.16	2	0.12	0.97	0.99	159.55	12*

$p < .001$

Model 1: Supervisor-rated performance only

Model 2: Identical to Model 1, but without items 5, 6, and 7

Although representing only a subset of the original Williams and Anderson (1991) performance measure, these four items are identical to those used by Van Dyne and LePine (1998) in their examination of the construct and predictive validity of helping and voice relative to employee task performance. The results from these authors suggest that supervisors are able to conceptually distinguish this measure of task performance from measures of extra-role behavior, offering some – albeit limited – evidence of the construct reliability for the four items used to measure task performance in the remainder of this dissertation. The work of Van Dyne and LePine (1998) also implies some precedent in the literature for using a reduced version of the original Williams and Anderson measure.

The subordinate-rated measurement model was specified to include all 12 subordinate-rated latent constructs (e.g., psychological empowerment, participation, delegation, accountability, proactive personality, locus of control, generalized self-efficacy, generalized self-esteem, challenge stress, hindrance stress, anxiety, and somatic symptoms). Estimation with individual items as indicators of the latent constructs would have required including a total of 98 items in the model. Given the sample size-to-input matrix ratio, I used multi-item composites (i.e., parcels; Landis, Beal, & Tesluk, 2000), rather than individual items as indicators for the included constructs. Random parceling was used to create the indicators for all variables except participation, delegation, and psychological empowerment. For both participation and delegation, separate parcels were created for items in which participation or delegation in a respondent's job was the target, as were those with a unit target. Even with parceling, a minimum of three indicators were used for each construct. If a construct had only three or four individual items, parceling was not used. With larger constructs, no more than 5 indicators (parcels) were used. Psychological empowerment indicators were grouped according to the



construct's four dimensions (meaning, competence, self-determination, and impact). As shown in Table 3b, this model resulted in marginal fit to the data ( $\chi^2 [750] = 1398.97$ ; RMSEA = .08; TLI = .87; CFI = .89). All factor loadings were greater than .50.

Table 3b  
Fit Statistics for Subordinate-rated Measurement Models

	No. of constructs	$\chi^2$	<i>df</i>	RMSEA	TLI	CFI	$\Delta\chi^2$	$\Delta df$
Model 1	12	1398.97	750	0.08	0.87	0.89		
Model 2	12	1398.99	751	0.08	0.87	0.89	0.02	1
Model 3	11	1224.79	647	0.08	0.87	0.89		
Model 4	Did not converge.							
Model 5	10	1285.94	657	0.08	0.86	0.88		
Model 6	10	965.72	515	0.08	0.89	0.91		
Model 7	11	1413.19	794	0.07	0.88	0.89		

Model 1: Full subordinate-rated model

Model 2: Identical to Model 1, but correlation between participation and delegation = 1 (compared to Model 1)

Model 3: Identical to Model 1, but participation and delegation combined into one "authority-sharing" construct

Model 4: Identical to Model 3, but correlation between psychological empowerment and efficacy = 1

Model 5: Identical to Model 3, but efficacy and psychological empowerment combined into one construct

Model 6: Identical to Model 3, but without psychological empowerment

Model 7: Identical to Model 3; but without the psychological empowerment competence items

As a second approach to ascertaining construct validity, factor loadings from this model were used to calculate the average variance extracted (AVE) for each latent construct. This approach allowed me to assess the discriminant validity of the constructs in the model or, in

other words, whether each measured construct is sufficiently distinct, capturing phenomena that the other measured constructs do not. To conclude that discriminant validity is acceptable, all study variables should exhibit AVE estimates greater than .50 (Fornell & Larcker, 1981). As indicated above, the latter requirement was met in the present model. Regarding the former requirement, with the exception of psychological empowerment (which had an AVE of .49), all study variables exceeded the AVE threshold of .50. Because psychological empowerment is treated as a control in this study (i.e., rather than as a focal variable) and because its AVE value was so close to the recommended .50 threshold (Fornell & Larcker, 1981), it was not judged to be problematic for the present purposes.

As a final test of the construct validity of the study variables, I compared the AVE value of each subordinate-rated construct to the squared correlations between that construct and all other constructs in the subordinate-rated measurement model as a means of further assessing discriminant validity (Hair, Anderson, Tatham, & Black, 2002; Podsakoff & MacKenzie, 1994). If the variance-extracted estimates are greater than a given squared correlation estimate, then the latent construct explains its constituent items better than it explains the given construct (Hair et al., 2009). In all but three instances, the relevant AVE estimate was greater than the squared correlation between a given construct and any other construct.

The first two exceptions were for participation and delegation. Specifically, participation had an AVE of .74, and delegation had an AVE of .73, but the squared correlation between the two was .94. These results suggest that participation and delegation might more reasonably be treated as a single “authority-sharing” construct. To examine this possibility further, I reran the subordinate-rated measurement model, but set the correlation between participation and delegation to a value of 1.0. If the fit of the model with the correlation freely estimated was

significantly better than the fit of the model where the correlation was constrained to equal one, there would be some evidence of discriminant validity (Hair et al., 2009). Comparing the two relevant models (see Table 3b) indicated a non-significant change in fit ( $\Delta\chi^2 [\Delta 1] = .02; n.s.$ ), suggesting that fit was neither better nor worse with the added constraint. Nonetheless, given the findings from the AVE analyses, for all remaining analyses I combined participation and delegation into a single construct (hereafter labeled “authority-sharing”) by creating overall job-target and unit-target parcels comprised of the relevant participation and delegation items. Table 3b shows that, although not strictly nested within the prior model (and thus a chi-square difference test cannot be conducted), this revised measurement model exhibited similar fit to the data ( $\chi^2 [647] = 1224.79; RMSEA = .08; TLI = .87; CFI = .89$ ) as the original measurement model.

The third exception was for psychological empowerment and its shared variance with efficacy. This exception was not surprising given that competence (a dimension of psychological empowerment) is conceptualized in terms of efficacy. Whereas the AVE estimate for psychological empowerment was .49, the squared correlation between psychological empowerment and efficacy was .66. I specified the subordinate-rated measurement model described immediately above (i.e., treating the participation and delegation parcels as indicators of a single authority-sharing construct), but in this case, I constrained the correlation between psychological empowerment and efficacy to a value of 1.0. The model, however, would not converge with this additional constraint. An alternative model was estimated in which all efficacy and psychological empowerment parcels were allowed to load on the same construct. Again, although this model is not strictly nested within the initial model, it fit the data worse than the initial model ( $\chi^2 [657] = 1285.94; RMSEA = .08; TLI = .86; CFI = .88$ ), suggesting that it

would be inappropriate to combine these two constructs. Still, the poor to marginal fit for this and the other models appears to be at least partially a function of the shared variance between psychological empowerment and efficacy. Estimating the same model without psychological empowerment produced acceptable fit to the data ( $\chi^2 [515] = 965.72$ ; RMSEA = .08; TLI = .89; CFI = .91). As an alternative means of addressing the high level of shared variance between efficacy and psychological empowerment, when testing hypotheses that require inclusion of both constructs in the same analyses, I used an estimate of psychological empowerment that does not include the three competence items. That is, I excluded the 3 competence items from my operationalization of psychological empowerment. The parcels representing meaning, self-determination, and impact were still included as indicators of the construct.

As no additional changes in the subordinate-rated or supervisor-rated measurement models were indicated, they were combined into an overall measurement model comprised of all latent constructs included in this study. Cronbach's (1951) alpha and Raykov's (1997) composite reliability (CR) estimates were calculated for each construct as indices of score reliability. Table 3b shows that results for the overall measurement model also revealed marginal fit to the data ( $\chi^2 [794] = 1413.19$ ; RMSEA = .07; TLI = .88; CFI = .89). As shown in Table 4, all alpha and CR values were well above .70, indicating acceptable levels of score reliability for all study variables. Overall, the results described above suggest that, although not ideal, adequate measures of study constructs were obtained, and it was reasonable to test the relationships proposed in Chapter 2.

Table 4 presents the means, standard deviations, and zero-order correlations for all study variables. Briefly, examination of the construct means indicates that respondents reported, on average, low to moderate levels of authority-sharing, challenge and hindrance stress, anxiety, and

Table 4  
Descriptive Statistics and Correlations between All Study Variables

Variable	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.
1. Age															
2. Gender (M = 1; F = 2)	.19*														
3. Organization tenure	.54**	-.06													
4. Psychological empowerment	.14	-.12	.29**												
5. Authority-sharing	-.27**	-.26**	.01	.27**											
6. Accountability	-.09	-.09	-.06	.32**	.42**										
7. Proactive personality	.10	.01	.11	.59**	.33**	.41**									
8. Locus of control	.20*	.03	.04	.04	-.26**	-.24**	.06								
9. Generalized self-efficacy	.10	.01	.06	.64**	.17*	.29**	.72**	.14							
10. Generalized self-esteem	.38**	.10	.14	.29**	-.26**	-.19*	.28**	.60**	.51**						
11. Challenge stress	-.09	.11	-.03	-.06	.17*	.40**	-.14	-.29**	-.08	-.32**					
12. Hindrance stress	-.18*	.09	-.18*	-.21*	.16	.40**	-.10	-.39**	-.16	-.51**	.70**				
13. Anxiety	-.22**	.14	-.20*	-.26**	.08	.36**	-.26**	-.31**	-.21*	-.44**	.68**	.70**			
14. Somatic symptoms	-.20*	.20*	-.09	-.28**	.15	.24**	-.19*	-.37**	-.28**	-.57**	.42**	.62**	.69**		
15. Supervisor Performance	-.16	-.03	-.00	-.06	-.03	.02	-.16	-.12	-.12	-.08	.06	.04	.16	.09	
Means	39.58	1.44	8.56	4.06	3.23	3.73	3.87	2.91	4.12	3.86	2.88	2.39	2.55	1.72	4.55
Standard deviations	9.28	.50	5.71	.60	1.04	.57	.55	.83	.52	.70	1.10	1.10	1.04	.90	.72
Cronbach's alpha reliability				.89	.97	.72	.92	.93	.88	.86	.95	.92	.87	.96	.82
Composite reliability (CR)				.79	.92	.81	.91	.92	.90	.87	.95	.92	.90	.96	.84
Average variance extracted (AVE)				.49	.79	.58	.67	.75	.76	.63	.87	.78	.76	.85	.65
Maximum shared squared variance (MSV)				.66	.19	.26	.62	.46	.66	.46	.56	.58	.58	.52	.03

\* Correlation is significant at the 0.05 level (2-tailed).

\*\* Correlation is significant at the 0.01 level (2-tailed).

somatic symptoms. There was a reasonable amount of variation in these variables within the subject sample. The mean levels of psychological empowerment and supervisor-rated performance were quite high ( $M = 4.06$  and  $4.55$ , respectively) and there was little variation about the mean for these variables ( $SD = .60$  and  $.72$ , respectively). The small amount of variance observed in these variables means that meaningful relationships between them and other study variables were unlikely to emerge. Indeed, as shown in Table 4, performance in particular did not exhibit any significant bivariate correlations with other variables, which could be a function of performance measures not generalizing across job categories.

### **Hypothesis Testing: Mediation**

In combination, Hypotheses 1 and 2 propose that the effects of structural empowerment on task performance and well-being outcomes will be mediated by challenge and hindrance stress. Due to mathematical and conceptual limitations associated with Baron and Kenny's (1986) 3-step procedure (see MacKinnon, Lockwood, Hoffman, West, & Sheets, 2002; MacKinnon, Lockwood, & Williams, 2004; Shrout & Bolger, 2002), it has been recommended that mediation analyses be based on formal tests of significance of the indirect effect (MacKinnon et al., 2002). Specifically, bootstrapping the sampling distribution of the indirect effect has been suggested as a better approach to testing mediation effects because it avoids power problems introduced by asymmetric and other forms of non-normality in sampling distributions of an indirect effect (Shrout & Bolger, 2002). It also does not rely on large-sample theory and, thus, may be a superior option with small samples (MacKinnon et al., 2004). I followed the recommendations of Preacher and Hayes (see also Hayes & Preacher, 2012; 2008) for testing the indirect effect of a predictor on an outcome through a mediator, while controlling for the other mediator. Doing so allowed me to estimate the indirect effect of  $X$  on  $Y$  [defined as

the product of the  $X \rightarrow M$  path ( $a$ ) and the  $M \rightarrow Y$  path ( $b$ ), or  $ab$ ] nonparametrically with bootstrapped coefficients (from 1000 bootstrap samples) for each independent variable, mediator, and dependent variable combination. Bias-corrected, accelerated 95% confidence intervals were used to determine the statistical significance of each indirect effect. If a given confidence interval does not include zero, the indirect effect is significant and mediation is supported.

Hypothesis 1 proposes that challenge stress will mediate the relationship of structural empowerment (i.e., authority-sharing, accountability) with task performance and well-being. Specifically, structural empowerment is expected to be positively related to employee appraisals of challenge stress, which in turn will be positively related to performance and negatively related to well-being. The indirect relationships of structural empowerment with performance ( $H1a$ ) and well-being ( $H1b$ ) as transmitted through challenge stress will likewise be positive and negative, respectively. Whereas Hypothesis 2 proposes that hindrance stress will also mediate the relationships between structural empowerment and the outcomes, the transmitted relationships with performance ( $H2a$ ) and well-being ( $H2b$ ) will both be negative. When this indirect effect is decomposed, the relationship between structural empowerment and hindrance stress will be positive, and the relationship between hindrance stress and the two outcome variables will be negative. As illustrated in Table 5, only accountability is significantly associated with employee appraisals of challenge stress ( $b = .94, p < .001$ ) and hindrance stress ( $b = .99, p < .001$ ). As likewise shown in Table 5, neither challenge nor hindrance stress were significantly related to performance; however, both were significantly associated with anxiety (challenge stress:  $b = .36, p < .001$ ; hindrance stress:  $b = .26, p < .001$ ). Of the two mediators, only hindrance stress was significantly related to somatic symptoms ( $b = .41, p < .001$ ). Note that, although the significant

Table 5  
Regression Results for Mediation Analyses

Variables	Model				
	Challenge stress	Hindrance stress	Performance	Anxiety	Somatic symptoms
Gender	.36*	.28	-.00	.15	.39**
Age	-.01	-.01	-.02*	-.02	-.02*
Organization tenure	.03	.00	.02	-.00	.03*
Psych. empowerment	-.55***	-.82***	-.09	-.43***	-.50***
Authority-sharing	.05	.05	-.08	-.07	.09
Accountability	.94***	.99***	.09	.34**	.20
Challenge stress			.03	.36***	-.05
Hindrance stress			-.02	.26***	.41***
$R^2$	.25	.34	.05	.63	.49
Adjusted $R^2$	.22	.32	.00	.60	.46
$F$	7.79***	11.97***	.91	28.20***	16.31***

Note.  $n=144$ . Unstandardized regression coefficients are reported.

\*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$

relationships between challenge/hindrance stress and the two indicators of well-being are positive, these are nonetheless consistent with my hypotheses. That is, increased anxiety and somatic symptoms are indicative of reduced well-being. Analyses of the indirect effects are presented in Table 6. These results indicate that both challenge stress ( $ab = .34$ , 95% CI [.17, .59]) and hindrance stress ( $ab = -.05$ , 95% CI [.10, .43]) mediate the relationship between accountability and anxiety. Hindrance stress likewise mediates the relationship between accountability and somatic symptoms ( $ab = .41$ , 95% CI [.22, .61]). These results provide partial support for H1b and H2b. H1a and H2a are unsupported.

### Hypothesis Testing: Moderation

Because Hypotheses 3 – 6 propose that the relationships between structural empowerment and challenge and hindrance stress will be moderated by employees' personality characteristics, moderated multiple linear regression was employed for hypothesis testing. Specifically, for each



Table 6  
 Analysis of the Indirect Effects of Each Predictor Through Each Mediator

	Performance				Anxiety				Somatic symptoms			
	<i>ab</i>	<i>SE</i>	Lower	Upper	<i>ab</i>	<i>SE</i>	Lower	Upper	<i>ab</i>	<i>SE</i>	Lower	Upper
<b>Authority sharing</b>												
Challenge stress	.00	.01	-.02	.02	.02	.04	-.06	.10	-.00	.01	-.02	.02
Hindrance stress	-.00	.01	-.02	.02	.01	.02	-.03	.07	.02	.04	-.05	.11
<b>Accountability</b>												
Challenge stress	-.02	.08	-.21	.14	<b>.34</b>	.11	.17	.59	-.05	.06	-.18	.08
Hindrance stress	.03	.07	-.11	.17	<b>.26</b>	.08	.10	.43	<b>.41</b>	.10	.22	.61

*Note.* Bootstrap sample size = 1,000. Gender, age, organization tenure, and psychological empowerment were controlled. Lower and Upper represent boundary values of bias-corrected and accelerated 95% confidence intervals. Bold *ab* values are those indirect effects with confidence intervals that do not include zero.

hypothesis, separate products for both authority-sharing and accountability with the relative personality characteristic were calculated to create two-way interaction terms. For each personality characteristic, one equation was estimated with challenge stress as the dependent variable, and one was estimated with hindrance stress as the dependent variable. In each of these equations, the independent variables were entered in three steps. The control variables were entered first, followed by the main effects for structural empowerment and a given personality characteristic. The final step entered two two-way interaction terms. To facilitate interpretation of the results, all controls and main-effects variables were centered about their means and standardized (Aiken & West, 1991). Moderation is most strongly supported if an interaction term is significant and if the block of interaction terms accounts for significant residual variance in the dependent variable after the inclusion of control variables and main effects.

Whereas Hypothesis 3a proposes that the relationship between structural empowerment and challenge stress will be stronger for more proactive employees, Hypothesis 3b proposes the relationship between structural empowerment and hindrance stress will be weaker for these individuals. Table 7 shows that the interaction of authority-sharing with proactive personality is not significantly associated with either challenge stress ( $b = .19, n.s.$ ) or hindrance stress ( $b = .01, n.s.$ ). Hypotheses 3a and 3b are not supported.

Hypothesis 4a suggests that internal locus of control will enhance the relationship between structural empowerment and challenge stress. Adding the two locus of control interaction terms to the relevant regression equation produces a .04 change in  $R^2$  ( $p < .05$ ), and the overall equation explains about 27% of the variance in challenge stress ( $F = 6.81, p < .001$ ). As shown in Table 8 and Figure 3, the interaction between authority-sharing and locus of control is significantly and negatively associated with challenge stress ( $b = -.19, p < .05$ ). Contrary to

Table 7  
Regression Results with Proactive Personality as the Moderator

Variables	Challenge stress						Hindrance stress					
	Step 1		Step 2		Step 3		Step 1		Step 2		Step 3	
	<i>b</i>	<i>SE</i>	<i>b</i>	<i>SE</i>	<i>b</i>	<i>SE</i>	<i>b</i>	<i>SE</i>	<i>b</i>	<i>SE</i>	<i>b</i>	<i>SE</i>
Constant	2.88	.09	2.88	.08	2.87	.09	2.39	.09	2.39	.08	2.39	.09
Gender	.15	.10	.22**	.08	.22**	.08	.10	.09	.15	.08	.15	.08
Age	-.16	.11	-.07	.10	-.07	.10	-.15	.11	-.08	.10	-.08	.10
Organization tenure	.09	.11	.12	.10	.14	.10	-.05	.11	.00	.10	.01	.10
Psych. empowerment	-.11	.10	-.09	.10	-.13	.10	-.24**	.09	-.36***	.10	-.36***	.10
Authority-sharing			.12	.09	.09	.10			.08	.09	.08	.09
Accountability			.61***	.09	.61***	.09			.59***	.09	.59***	.09
Proactive personality			-.40***	.11	-.35**	.11			-.16	.10	-.16	.11
Authority-sharing x proactive Personality					.19	.10					.01	.10
Accountability x proactive Personality					-.13	.09					-.02	.09
$R^2$	.04		.33		.35		.10		.36		.36	
Adjusted $R^2$	.01		.29		.30		.07		.32		.31	
$F$	1.32		9.39***		7.87***		3.78**		10.71***		8.21***	
$\Delta R^2$			.29		.02				.26		.00	
$F$ for $\Delta R^2$			19.45***		2.04				18.08***		.02	

Note.  $n=144$ . Unstandardized regression coefficients are shown.

\*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$

Table 8  
Regression Results with Locus of Control as the Moderator

Variables	Challenge stress						Hindrance stress					
	Step 1		Step 2		Step 3		Step 1		Step 2		Step 3	
	<i>b</i>	<i>SE</i>	<i>b</i>	<i>SE</i>	<i>b</i>	<i>SE</i>	<i>b</i>	<i>SE</i>	<i>b</i>	<i>SE</i>	<i>b</i>	<i>SE</i>
Constant	2.88	.09	2.88	.08	2.88	.08	2.39	.09	2.39	.07	2.38	.08
Gender	.15	.10	.17*	.09	.17*	.08	.10	.09	.12	.08	.12	.08
Age	-.16	.11	-.08	.10	-.10	.10	-.15	.11	-.05	.10	-.04	.10
Organization tenure	.09	.11	.13	.10	.11	.10	-.05	.11	-.02	.09	-.01	.09
Psych. empowerment	-.11	.10	-.27***	.09	-.26**	.09	-.24**	.09	-.40***	.08	-.40***	.08
Authority-sharing			.02	.10	.05	.10			.00	.09	-.01	.09
Accountability			.49***	.09	.46***	.09			.51***	.09	.51***	.09
Locus of control			-.17*	.09	-.18**	.09			-.27***	.08	-.26**	.08
Authority-sharing x locus of control					-.19*	.10					.03	.09
Accountability x locus of control					.23*	.09					-.06	.09
$R^2$	.04		.28		.31		.10		.40		.40	
Adjusted $R^2$	.01		.24		.27		.07		.37		.36	
$F$	1.32		7.38***		6.81***		3.78**		12.75***		9.85***	
$\Delta R^2$			.24		.04				.30		.00	
$F$ for $\Delta R^2$			14.94***		3.76*				22.38***		.22	

Note.  $n=144$ . Unstandardized regression coefficients are shown.

\*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$

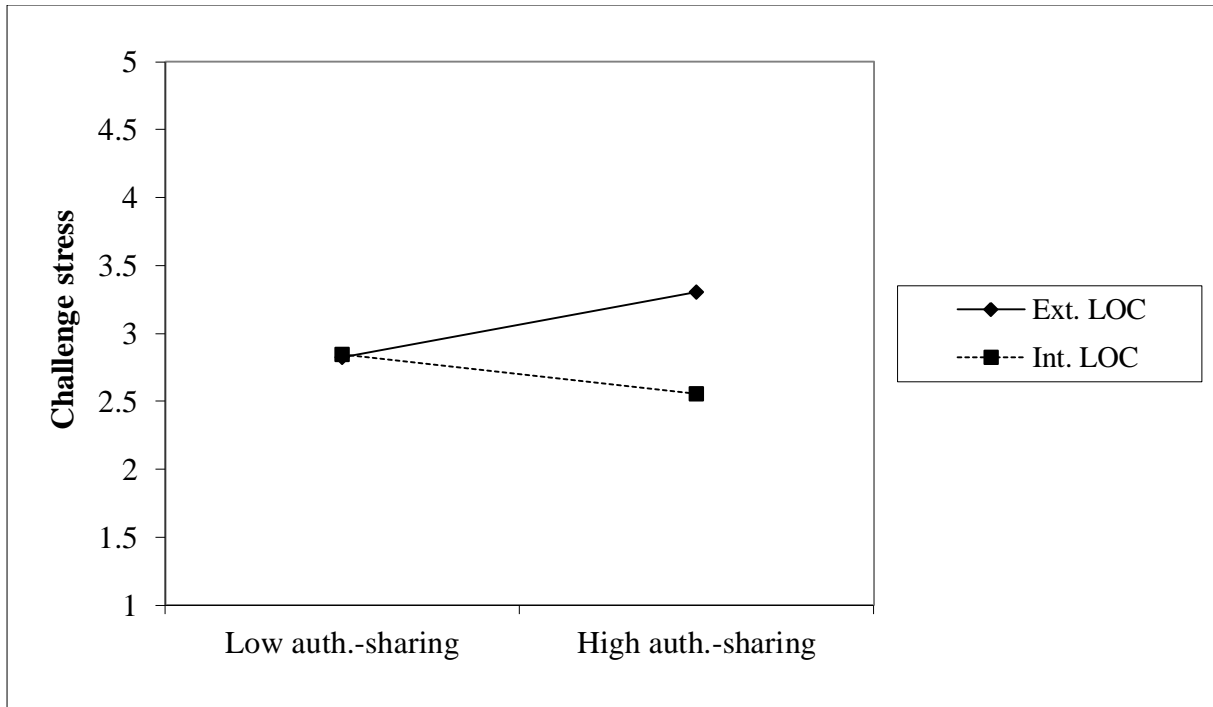


Figure 3  
Moderating Effects of Locus of Control on the Authority-sharing – Challenge Stress Relationship

expectations, the relationship between authority-sharing and challenge stress is negative for internally controlled individuals; the relationship is positive for externally controlled individuals. The interaction between accountability and locus of control is likewise significantly associated with challenge stress ( $b = .23, p < .05$ ). In this case, however, the nature of the interaction is consistent with expectations. As shown in Figure 4, the accountability-challenge stress relationship is stronger for internally controlled individuals. Given the totality of these results, *H4a* is only partially supported. Hypothesis 4b proposes that the association of structural empowerment with hindrance stress will be stronger for externally controlled individuals than for those who are internally controlled. Because neither interaction term is significantly associated with hindrance stress, this hypothesis is unsupported.

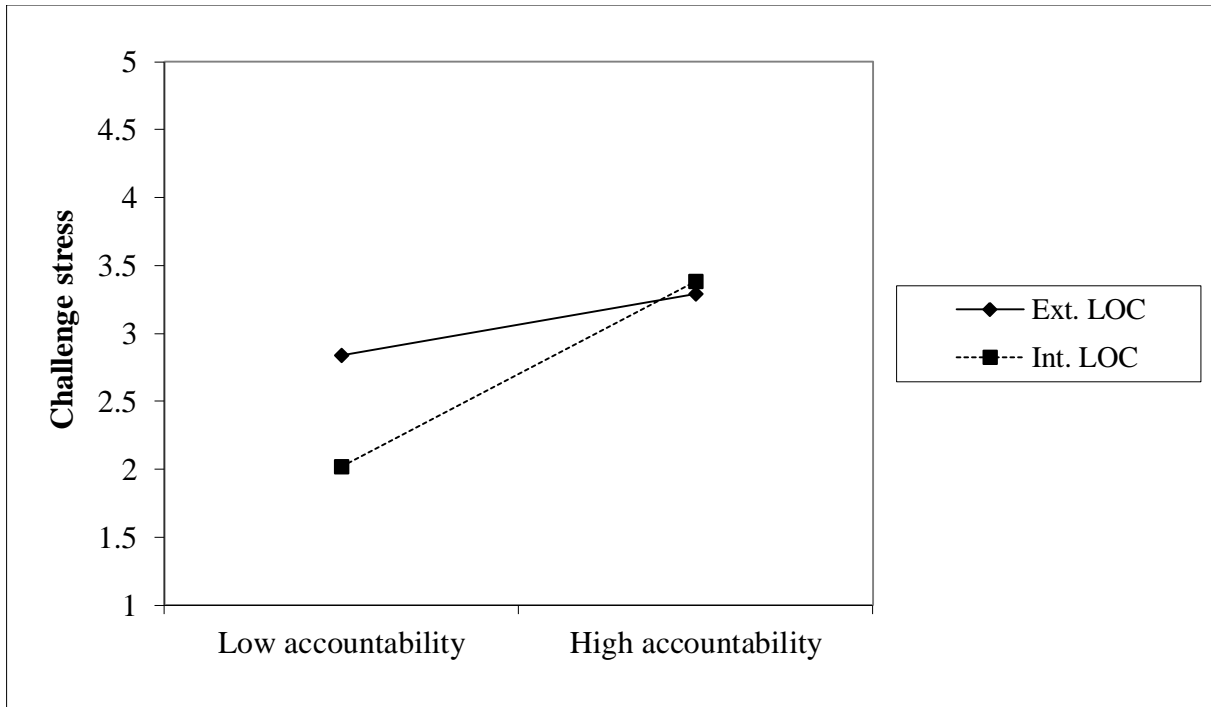


Figure 4  
Moderating Effects of Locus of Control on the Accountability – Challenge Stress Relationship

Whereas Hypotheses 5a and 6a posit that generalized self-efficacy and generalized esteem will enhance the positive relationship between structural empowerment and challenge stress, Hypotheses 5b and 6b suggest these personality characteristics will weaken the association between structural empowerment and hindrance stress. As shown in Tables 9 and 10 none of these hypotheses are supported in the present data. Esteem is significantly and negatively associated with both challenge stress ( $b = -.20, p < .05$ ) and hindrance stress ( $b = -.41, p < .001$ ). These results indicate that those who are higher in self-esteem are less likely to experience either type of stress.

Table 9  
Regression Results with Efficacy as the Moderator

Variables	Challenge stress						Hindrance stress					
	Step 1		Step 2		Step 3		Step 1		Step 2		Step 3	
	<i>b</i>	<i>SE</i>	<i>b</i>	<i>SE</i>	<i>b</i>	<i>SE</i>	<i>b</i>	<i>SE</i>	<i>b</i>	<i>SE</i>	<i>b</i>	<i>SE</i>
Constant	2.88	.09	2.88	.08	2.87	.09	2.39	.09	2.39	.08	2.39	.08
Gender	.15	.10	.19*	.09	.19*	.09	.10	.09	.15	.08	.14	.08
Age	-.17	.11	-.11	.11	-.11	.11	-.16	.11	-.10	.10	-.10	.10
Organization tenure	.08	.11	.13	.11	.14	.11	-.05	.11	.00	.10	.02	.10
Psych. empowerment <sup>a</sup>	-.05	.10	-.16	.12	-.18	.12	-.19*	.09	-.31**	.11	-.33**	.11
Authority-sharing			.05	.10	.03	.10			.06	.09	.05	.09
Accountability			.53***	.10	.53***	.10			.57***	.09	.56***	.09
Efficacy			-.14	.11	-.13	.11			-.14	.10	-.14	.11
Authority-sharing x efficacy					.14	.10					.10	.09
Accountability x efficacy					-.06	.10					-.08	.09
<i>R</i> <sup>2</sup>	.03		.24		.26		.08		.33		.33	
Adjusted <i>R</i> <sup>2</sup>	.00		.21		.21		.05		.29		.29	
<i>F</i>	1.04		6.28***		5.12***		2.96*		9.36***		7.40***	
$\Delta R^2$			.22		.01				.25		.01	
<i>F</i> for $\Delta R^2$			12.91***		.01				16.57***		.68	

Note. *n*=144. Unstandardized regression coefficients are shown.

<sup>a</sup> The competence dimension is not included in the psychological empowerment variable for the regression equations reported in this table.

\* *p* < .05; \*\* *p* < .01; \*\*\* *p* < .001

Table 10  
Regression Results with Esteem as the Moderator

Variables	Challenge stress						Hindrance stress					
	Step 1		Step 2		Step 3		Step 1		Step 2		Step 3	
	<i>b</i>	<i>SE</i>	<i>b</i>	<i>SE</i>	<i>b</i>	<i>SE</i>	<i>b</i>	<i>SE</i>	<i>b</i>	<i>SE</i>	<i>b</i>	<i>SE</i>
Constant	2.88	.09	2.88	.08	2.89	.08	2.39	.09	2.39	.07	2.38	.07
Gender	.15	.10	.18*	.09	.19*	.09	.10	.09	.14	.08	.13	.08
Age	-.16	.11	-.04	.11	-.03	.11	-.15	.11	.04	.10	.03	.10
Organization tenure	.09	.11	.11	.10	.09	.11	-.05	.11	-.06	.09	-.05	.09
Psych. empowerment	-.11	.10	-.20*	.10	-.19	.10	-.24**	.09	-.25**	.09	-.26**	.09
Authority-sharing			.01	.10	.01	.10			-.02	.09	-.03	.09
Accountability			.48***	.10	.47***	.10			.47***	.08	.47***	.09
Esteem			-.20*	.10	-.22*	.10			-.41***	.09	-.40***	.09
Authority-sharing x esteem					.00	.10					.00	.09
Accountability x esteem					.07	.10					-.04	.09
$R^2$	.04		.28		.28		.10		.43		.40	
Adjusted $R^2$	.01		.24		.23		.07		.40		.39	
$F$	1.32		7.41***		5.77***		3.78**		14.68***		11.31***	
$\Delta R^2$			.24		.00				.33		.00	
$F$ for $\Delta R^2$			14.99***		.32				26.45***		.14	

Note.  $n=144$ . Unstandardized regression coefficients are shown.

\*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$



## CHAPTER FIVE: DISCUSSION

The purpose of this dissertation was to examine the effects of empowerment and its consequences and how stress, employee well-being, and personality characteristics are related to structural empowerment. Particularly, I investigated the links between structural empowerment practices and both employee performance and well-being, as well as the mediating roles of challenge and hindrance stress, and the moderating roles of proactive personality, locus of control, generalized self-efficacy, and generalized-esteem.

I found only limited support for the proposed hypotheses. Positive relationships between accountability and both challenge and hindrance stress were discovered. A positive relationship between challenge stress and anxiety, as well as positive relationships between hindrance stress and both anxiety and somatic symptoms were found; which, indicate that both types of stress are associated with decreased employee well-being. These results are consistent with previous research (Alexander, 1991; LePine et al., 2005; Spector et al., 1988) in that empowerment practices are often characterized as added accountability on employees' shoulders. Empowerment practices may be associated with more experienced stress (i.e., feelings of challenge or hindrance) among employees as they are called to account for their actions. Results also support the theory presented in Chapter Two regarding the link between stress and employee well-being. First, both challenge and hindrance stress are expected to be straining because they represent increased demands on individuals. Second, because the transactional model suggests that employees appraise objective workplace stressors either negatively or positively (Folkman et al., 1986), when they appraise stressors as having the potential to pose threat of harm or loss, they will be more likely to produce negative outcomes, such as physiological responses (i.e., anxiety or somatic symptoms; Lazarus et al., 1985).

For the moderation hypotheses, results demonstrate that locus of control moderates the relationship between structural empowerment and challenge stress. Specifically, the positive relationship between authority-sharing and felt challenge stress was weaker for internal locus of control individuals than for external locus of control individuals, whereas the relationship between accountability and felt challenge stress was stronger for internals than for externals. The significant relationship between accountability and challenge stress, moderated by locus of control, is consistent with theory presented in Chapter Two. Specifically, this finding suggests that higher accountability results in greater feelings of challenge among individuals who are internals. When employees believe there is incongruence in the location of control and the extent to which they must answer to superiors, they are expected to experience stress (Houston, 1972). How much responsibility a person has is influenced to some extent by factors such as empowerment practices (Marino & White, 1985). In this case, a person is being held more accountable for successes or failures and is more likely to view this accountability as a challenge. Contrary to expectations, the partially supported Hypothesis 5a indicates that more authority-sharing (i.e., when employees' degree of participation is higher and they are delegated more tasks) results in greater feelings of challenge among individuals who are externals (rather than internals). By examining the results, it appears that – consistent with my arguments – internals are generally less likely to experience stress, be it challenge or hindrance related. Contrary to my expectations, though, formally sharing authority with externals seems to counteract their external nature to some extent. For internals, accountability is what really matters. Authority sharing may not be as stressful for them as being held accountable on given tasks.

The pattern of findings suggests that, overall, accountability is an important factor in understanding the extent to which employees experience challenge and hindrance stress, but

authority-sharing is not. Whereas early research most commonly examined practices that provide opportunities for employees to participate in decision-making, such as participation and delegation, as examples of structural empowerment (Burke, 1986; Kanter, 1977; Menon, 2001), recent work increasingly highlights accountability as an important element of structural empowerment (Eylon & Bamberger, 2000; Robbins et al., 2002). As addressed in Chapter Two, there is limited agreement about the overall effectiveness of structural empowerment practices. In some work, both participation and delegation have exhibited only weak or mixed relationships with outcomes such as performance and satisfaction (Cotton et al., 1988; Locke & Schweiger, 1979; Schriesheim et al., 1998; Wagner, 1994; Wagner et al., 1997). Of the existing research that demonstrates positive aspects of structural empowerment, the following question remains: “...what if empowered employees do not feel accountable, how might this condition influence subsequent performance?” (Wallace, Johnson, Mathe, & Paul, 2011: 840). In empowerment, accountability appears to be a critical boundary condition that helps maintain the level of engagement for empowered employees (Breux, Munyon, Hochwarter, & Ferris, 2009; Wallace et al., 2011), and it is likely to help channel resources toward achieving outcomes (Hall et al., 2006). When accountability is low, employees who are given more authority may not have clear behavioral standards to guide the application of their shared decision-making power (Wallace et al., 2011). The reason that study results found accountability to be significant in multiple instances – whereas authority-sharing was not – could be due to the point that it is not how much authority is shared with employees, but whether they are held accountable for their authority.

With respect to the mediation hypotheses, neither challenge nor hindrance stress were found to be significantly related to task performance. Their lack of findings can be explained by either (a) a small amount of variance in actual performance in this sample or (b) the inability of

my measure to capture variance in performance. The former is a potential problem in any research that seeks participation from employees and then supervisors. I speculate that employees who responded to the first survey only provided supervisor contact information if they felt confident that their supervisors would rate them highly. It is more likely (or at least possible) that Hypotheses 1 and 2a would have been supported if there had been more variation in performance ratings.

Results provide little support for the moderating hypotheses relating to challenge and hindrance stress. In particular, I found no support in the proposed relationships between structural empowerment practices and hindrance stress, with personality characteristics as a moderating role. The general lack of findings may be due to (a) the nature of this study's effective sample, and (a) how individuals high in these personality characteristics (i.e., proactive personality, locus of control, generalized self-efficacy, and generalized self-esteem) appraise hindrance stress. The output in Tables 7 through 10 shows the relationships of personality characteristics with employees' appraisals of challenge and hindrance stress. These connections are all negative, and only three are not statistically significant (generalized self-efficacy to challenge stress and hindrance stress,  $b = -.14$  for both; proactive personality to hindrance stress,  $b = -.16$ ). An optimistic interpretation of these findings is that those whose personalities endow them with sufficient personal resources and whose personalities can be characterized by strong active engagement and personal initiative are less likely to experience either challenge or hindrance stress, regardless of the contexts in which they work. A less optimistic interpretation is that those who are high in the personality characteristics and low in challenge and hindrance stress are more likely to complete online surveys.

## **Strengths and Limitations**

There are several strengths to how this study was conducted. First, data were collected from individuals in multiple organizations across a variety of different industries and conditions, which has the potential to increase the generalizability of results across the various environments and circumstances (although, the extent of this potential generalizability cannot be known). The panel of participants at StudyResponse provides access to thousands of employees and consists of various cultures and ethnic groups. For example, they report more than 41 different occupational types and an age range from 18 to more than 90 years old (Stanton, 2006). Second, the independent variables and mediators were collected at multiple points in time. This approach created temporal separation of these measures such that the second survey was less likely to be influenced by the responses to the first. The temporal separation likewise aided in reducing context-induced mood and other measurement context effects, which could potentially decrease the likelihood of common-method variance (Podsakoff et al., 2003). Third, independent and dependent variables were obtained from different sources (i.e., supervisors and employees), thus perceptual biases are thought to be reduced and effects of implicit theories and response styles lessened (Podsakoff et al., 2012).

Whereas the reported results of this dissertation offer some perspective on the role of structural empowerment in influencing stress appraisals and employee well-being, they should be viewed with a number of limitations in mind. One weakness is that the two dependent variables (i.e., anxiety and somatic symptoms) for which I found significant results were both collected at the same time and from the same source as the mediators. Some study results could have been inflated due to common-method variance (CMV). Yet, there is evidence that the observed relationships are not just the result of CMV. Specifically, as shown in Chapter Four, there is

evidence of differential relationships between the mediating factors of challenge and hindrance stress and the well-being outcomes (i.e., anxiety and somatic symptoms). As Spector argues, unless CMV is “so small as to be inconsequential” (2006: 224), one would not expect to observe differential correlations across the variables in a study. As shown in Table 4, whereas challenge stress exhibits a correlation of .42 with somatic symptoms, hindrance stress exhibits a correlation of .62.

Only the first four items of the supervisor-rated task performance measure were retained for analyses due to the removal of the latter 3 items of the measure resulted in acceptable fit to the data. This approach could be problematic because it does not allow for an adequate generalizability comparison of task performance to other studies using the Williams & Anderson (1991) measure.

The nature of the method used to collect sample data (i.e., using StudyResponse) is likely to contribute to limitations of this dissertation as well. A disadvantage related to StudyResponse’s open recruitment model is volunteer bias resulting from a non-random sample. For example, the panelists might not represent a cross section of North American society. Typical StudyResponse panelists have greater access to and experience with information technology, higher education levels, more free time, and a higher interest in web browsing (Stanton, 2006). It is also unclear how motivated they are to mindfully respond to survey items. As described, several respondents in the present study were removed due to evidence of careless responding. Because items were included in the present study to help identify careless responding and questionable respondents could be removed, it is hoped that the data that was actually analyzed was of a sufficiently high quality. A final limitation is the cross-sectional study

design. A longitudinal design would have allowed for a stronger test of the mediation hypotheses.

### **Final Remarks**

This dissertation illustrates that accountability positively affects appraisals of challenge and hindrance stress; felt hindrance stress adversely affects employee well-being; proactive personality enhances the relationship between authority-sharing and challenge stress; and locus of control moderates the relationship between empowerment practices and challenge stress appraisal. Whereas research has placed a great deal of emphasis on job performance as an outcome of structural empowerment, few studies have explicitly considered its effects on employee well-being—such as the influence on anxiety and health (Laschinger et al., 2001). I proposed and found partial support for a model linking structural empowerment to anxiety and somatic symptoms through the mediating effects of felt challenge and hindrance stress. This knowledge furthers understanding of the relationships between empowerment practices and well-being outcomes. It sheds light on how the so-called “magic spell” of empowerment influences employee behavior, and aids in organizations’ efforts to effectively address workplace stress. I believe these findings broaden the focus of prior research by addressing empirical inconsistencies related to the belief that greater control cushions the negative effects from increased demands, and I hope it will help researchers understand why empowerment may sometimes fail to improve performance and well-being.

## REFERENCES

- Ahlbrandt, R. S., Leana, C. R., & Murrell, A. J. 1992. Employee involvement programs improve corporate performance. . *Long Range Planning*, 25(5): 91-98.
- Aiken, L. S., & West, S. G. 1991. *Multiple regression: Testing and interpreting interactions*. Newbury Park, London: Sage.
- Alexander, J. A. 1991. Adaptive change in corporate control practices. *Academy of Management Journal*, 34: 162-193.
- Anderson, R. E., & Huang, W. Y. 2006. Empowering salespeople: Personal, managerial, and organizational perspectives. *Psychology & Marketing*, 23: 139-159.
- Argyris, C. 1998. Empowerment: The emperor's new clothes. *Harvard Business Review*, 76(3): 98-105.
- Ashforth, B. 1989. The experience of powerlessness in organizations. *Organizational Behavior and Human Decision Processes*, 43: 207-242.
- Bandura, A. 1977. Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84: 191-215.
- Bandura, A. 1986. *Social foundations of thought and action: A social-cognitive view*. Englewood Cliffs, NJ: Prentice-Hall.
- Bandura, A. 1989. Human agency in social cognitive theory. *American Psychologist*, 44: 1175-1184.
- Bandura, A. 1997. *Self-efficacy: The exercise of control*. New York: W. H. Freeman.
- Bartunek, J. M. 1995. *Attending to difference: A social interpretivist approach to empowerment*. Paper presented at the annual meeting of the Academy of Management, Vancouver.
- Bateman, T. S., & Crant, M. J. 1993. The proactive component of organizational behavior: A measure and correlates. *Journal of Organizational Behavior*, 14: 103-118.
- Bell, N. E., & Staw, B. M. 1989. People as sculptors versus sculpture. In M. B. Arthur, D. T. Hall, & B. S. Lawrence (Eds.), *Handbook of career theory*: 232-251. Cambridge, England: Cambridge University Press.
- Bernardi, R. A. 1997. The relationships among locus of control, perceptions of stress, and performance. *Journal of Applied Business Research*, 13: 1-8.



- Blau, J. R., & Alba, R. D. 1982. Empowering nets of participation. *Administrative Science Quarterly*, 27: 363-379.
- Blegen, M. A. 1993. Nurses' job satisfaction: a meta-analysis of related variables. *Nursing Research*, 42: 36-41.
- Breaux, D. M., Munyon, T. P., Hochwarter, W. A., & Ferris, G. R. 2009. Politics as a moderator of the accountability -- job satisfaction relationship: Evidence across three studies. *Journal of Management*, 35: 307-326.
- Brief, A., & Nord, W. R. 1990. *Meaning of Occupational Work*. Lexington, MA: Lexington Books.
- Brockner, J. 1988. *Self-esteem at work*. Lexington, MA: Lexington Books.
- Burke, W. 1986. Leadership as empowering others. In I. S. Srivastara (Ed.), *Executive power* 51-77. San Francisco: Jossey-Bass.
- Case, R. H., & Singer, J. 1997. Re: Project team empowerment aboard the Starship Enterprise. *Research Technology Management*, 40: 13-16.
- Cavanaugh, M. A., Boswell, W. R., Roehling, M. V., & Boudreau, J. W. 2000. An Empirical Examination of Self-Reported Work Stress Among U.S. Managers. *Journal of Applied Psychology*, 85: 65-74.
- Chen, G., Gully, S. M., & Eden, D. 2001. Validation of a new general self-efficacy scale. *Organizational Research Methods*, 4: 62-83.
- Conger, J. A., & Kanungo, R. N. 1988. The Empowerment Process: Integrating Theory and Practice. *Academy of Management Review*, 13: 471-482.
- Connor, P. E. 1992. Decision-making participation patterns: The role of organizational context. *Academy of Management Journal*, 35: 218-231.
- Cotton, J. L., Vollrath, D. A., Froggatt, K. L., Lengnick-Hall, M. L., & Jennings, K. R. 1988. Employee participation: Diverse forms and different outcomes. *Academy of Management Review*, 13: 8-22.
- Cronbach, L. J. 1951. Coefficient alpha and the internal structure of tests. *Psychometrika*, 16: 297-334.
- Daniels, K., & Guppy, A. 1992. Control, information-seeking preferences, occupational stressors, and psychological well-being. *Work & Stress*, 6: 347-353.
- Davis, W. L., & Davis, D. E. 1972. Internal-external control and attribution of responsibility for success or failure. *Journal of Personality*, 40: 123-136.

- de Rijk, A. E., Le Blanc, P. M., Schaufeli, W. B., & de Jonge, J. 1998. Active coping and need for control as moderators of the job demand-control model: Effects on burnout. *Journal of Occupational and Organizational Psychology*, 71: 1-18.
- Deci, E. L., Connell, J. P., & Ryan, R. M. 1989. Self-determination in a work organization. *Journal of Applied Psychology*, 74: 580-590.
- Elangovan, A. A., & Xie, J. L. 1999. Effects of perceived power of supervisor on subordinate stress and motivation: The moderating role of subordinate characteristics. *Journal of Organizational Behavior*, 20: 359-373.
- Eylon, D., & Bamberger, P. 2000. Empowerment cognitions and empowerment acts. *Group & Organization Management*, 25: 354-373.
- Farh, J., & Scott, W. E. 1983. The experimental effects of "autonomy" on performance and self-reports of satisfaction. *Organizational Behavior and Human Decision Processes*, 31: 203-222.
- Fisher, S. 1984. *Stress and the perception of control*. Hillsdale, NJ: Erlbaum.
- Folkman, S., Lazarus, R. S., Gruen, R. J., & DeLongis, A. 1986. Appraisal, coping, health status, and psychological symptoms. *Journal of Personality and Social Psychology*, 30: 571-579.
- Fornell, C., & Larcker, D. F. 1981. Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18: 39-50.
- Gagne, M., Senecal, C. B., & Koestner, R. 1997. Proximal job characteristics, feelings of empowerment, and intrinsic motivation: A multidimensional model. *Journal of Applied Social Psychology*, 27: 1222-1240.
- Ganster, D. C., & Schaubroeck, J. 1991a. Role stress and worker health: An extension of the plasticity hypothesis of self-esteem. *Journal of Social Behavior and Personality*, 6: 349-360.
- Ganster, D. C., & Schaubroeck, J. 1991b. Work stress and employee health. *Journal of Management*, 17: 235-271.
- Ghorpade, J., Hatstrup, K., & Lackritz, J. R. 1999. The use of personality measures in cross-cultural research: A test of three personality scales across two countries. *Journal of Applied Psychology*, 84: 670-679.
- Gist, M., & Mitchell, T. N. 1992. Self-efficacy: A theoretical analysis of its determinants and malleability. *Academy of Management Review*, 12: 183-211.

- Göritz, A. S., Wolff, H.-G., & Goldstein, D. G. 2008. Individual payments as a longer-term incentive in online panels. *Behavior Research Methods*, 40: 1144-1149.
- Hackman, J. R., & Oldham, G. R. 1975. Development of the job diagnostic survey. *Journal of Applied Psychology*, 60: 159-170.
- Hackman, J. R., & Oldham, G. R. 1980. *Work redesign*. Reading, MA: Addison-Wesley.
- Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. 2002. *Multivariate data analysis* (5th ed.). Englewood Cliffs, NJ: Prentice Hall.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. 2009. *Multivariate data analysis* (7th ed.). Upper Saddle River, NJ: Prentice Hall.
- Hall, A. T., Royle, M. T., Brymer, R. A., Perrewe, P. L., Ferris, G. R., & Hochwarter, W. A. 2006. Relationships between felt accountability as a stressor and strain reactions: The neutralizing role of autonomy across two studies. *Journal of Occupational Health Psychology*, 11: 87-99.
- Heider, F. 1958. *The psychology of interpersonal relations*. New York: Wiley.
- Hesketh, B. 1993. Measurement issues in industrial and organizational psychology. *International Review of Industrial and Organizational Psychology*, 8: 133-172.
- Hochwarter, W. A., Kacmar, C. J., & Ferris, G. R. 2003. Accountability at work: An examination of antecedents and consequences, *Paper presented at the 18th Annual Conference of the Society of Industrial and Organizational Psychology*. Orlando, FL.
- Honold, L. 1997. A review of the literature on employee empowerment. *Empowerment in Organizations*, 5: 202-212.
- Houston, K. 1972. Control over stress, locus of control, and response to stress. *Journal of Personality and Social Psychology*, 21: 249-255.
- Huang, X., Iun, J., Liu, A., & Gong, y. 2010. Does participative leadership enhance work performance by inducing empowerment or trust? The differential effects on managerial and non-managerial subordinates. *Journal of Organizational Behavior*, 31: 122-143.
- Irvine, D. M., & Evans, M. G. 1995. Job satisfaction and turnover among nurses: integrating research findings across studies. *Nursing Research*, 44: 246-253.
- Ivancevich, J. M. 1986. Life events and hassles as predictors of health symptoms, job performance, and absenteeism. *Journal of Occupational Behavior*, 7: 39-51.
- Ivancevich, J. M., Matteson, M. T., & Preston, C. 1982. Occupational stress, Type A behavior, and physical well being. *Academy of Management Journal*, 25: 373-391.

- Janssen, O. 2004. The barrier effect of conflict with superiors in the relationship between employee empowerment and organizational commitment. *Work & Stress*, 18: 56-65.
- Jones, C., & Page, S. 1986. Locus of control, assertiveness, and anxiety as personality variables in stress-related headaches. *Headache*, 26: 369-374.
- Judge, T. A., Locke, E. A., & Durham, C. C. 1997. The dispositional causes of job satisfaction: A core evaluations approach. *Research in Organizational Behavior*, 19: 151-188.
- Judge, T. A., Locke, E. A., Durham, C. C., & Kluger, A. N. 1998. Dispositional effects on job and life satisfaction: The role of core evaluations. *Journal of Applied Psychology*, 83: 17-34.
- Kahn, R. L., & Byosiere, P. 1992. Stress in organizations. In M. D. Dunnette, & L. M. Hough (Eds.), *Handbook of Industrial and Organizational Psychology*, 2nd ed., Vol. 3: 571-650. Palo Alto, CA.
- Kanter, R. M. 1977. *Men and women of the corporation*. New York: Basic Books.
- Karasek, R. A. 1979. Job demands, decision latitude, and mental strain: Implications for job redesign. *Administrative Science Quarterly*, 24: 285-308.
- Karasek, R. A. 1997. Demand - control model: A social, emotional, and physiological approach to stress risk and active behavior development. In S. L. Sauter, L. R. Murphy, J. J. Hurrell, & L. Levi (Eds.), *Encyclopedia of occupational health and safety*: 34. Geneva, Switzerland: ILO.
- Kirkman, B. L., & Rosen, B. 1999. Beyond Self-Management: Antecedents and Consequences of Team Empowerment. *Academy of Management Journal*, 42: 58-74.
- Lam, S. S. K., Chen, X.-P., & Schaubroeck, J. 2002. Participative decision making and employee performance in different cultures: The moderating effects of allocentrism/idiocentrism and efficacy. *Academy of Management Journal*, 45: 905-914.
- Landeweerd, J. A., & Boumans, N. P. G. 1994. The effect of work dimensions and need for autonomy on nurses' work satisfaction and health. *Journal of Occupational and Organizational Psychology*, 67: 207-217.
- Landis, R. S., Beal, D. J., & Tesluk, P. E. 2000. A comparison of approaches to forming composite measures in structural equation models. *Organizational Research Methods*, 3: 186.
- Langfred, C. W., & Moyer, N. A. 2004. Effects of task autonomy on performance: An extended model considering motivational, informational, and structural mechanisms. *Journal of Applied Psychology*, 89: 934-945.

- Laschinger, H. K. S., Finegan, J., Shamian, J., & Wilk, P. 2001. Impact of structural and psychological empowerment on job strain in nursing work settings: expanding Kanter's Model. *Journal of Nursing Administration*, 31: 260-272.
- Laschinger, H. K. S., Finegan, J., Shamian, J., & Wilk, P. 2003. Workplace empowerment as a predictor of nurse burnout in restructured healthcare settings. *Longwoods Review*, 1: 1-3.
- Laschinger, H. K. S., Shamian, J., & Thomson, D. 2001. Impact of magnet hospital characteristics on nurses' perceptions of trust, burnout, quality of care, and work satisfaction. *Nursing Economic*, 19: 209-219.
- Latham, G. P., & Yukl, G. A. 1975. Assigned versus participative goal setting with educated and uneducated wood workers. *Journal of Applied Psychology*, 60: 299-302.
- Lawler, E. E. 1973. *Motivation in work organizations*. Monterey, CA: Brooks/Cole.
- Lawler, E. E., III, & Hackman, J. R. 1969. Impact of employee participation in the development of pay incentive plans: A field experiment. *Journal of Applied Psychology*, 53: 467-471.
- Lazarus, R. S., DeLongis, A., Folkman, S., & Gruen, R. 1985. Stress and adaptational outcomes. *American Psychologist*, 40: 770-779.
- Lazarus, R. S., & Folkman, S. 1984. *Stress, appraisal, and coping*. New York: Springer.
- Leana, C. R. 1986. Predictors and consequences of delegation. *Academy of Management Journal*, 29: 754-774.
- Leana, C. R. 1987. Power relinquishment versus power sharing: Theoretical clarification and empirical comparison of delegation and participation. *Journal of Applied Psychology*, 72: 228-233.
- LePine, J. A., Podsakoff, N. P., & LePine, M. A. 2005. A meta-analytic test of the challenge stressor-hindrance stressor framework: An explanation for inconsistent relationships among stressors and performance. *Academy of Management Journal*, 48: 768-775.
- Litt, M. D. 1988. Self-efficacy and perceived control: Cognitive mediators of pain tolerance. *Journal of Personality and Social Psychology*, 54: 149-160.
- Locke, E. A., McClear, K., & Knight, D. 1996. Self-esteem and work. *International Review of Industrial/Organizational Psychology*, 11: 1-32.
- Locke, E. A., & Schweiger, D. M. 1979. Participation in decision-making: One more look. In B. Staw, & L. L. Cummings (Eds.), *The innovative organization: Productivity programs in practice*: 265-339. Greenwich, CT: JAI Press.

- Marino, K. E., & White, S. E. 1985. Departmental structure, locus of control, and job stress: The effect of a moderator. *Journal of Applied Psychology*, 70: 782-784.
- Marino, S. 1997. The stress epidemic, *Industry Week*, Vol. 246(7): 14.
- Mauno, S., Kinnunen, U., & Ruokolainen, M. 2006. Exploring work- and organization-based resources as moderators between work-family conflict, well-being, and job attitudes. *Work & Stress*, 20: 210-233.
- Maynard, M. T., Gilson, L. L., & Mathieu, J. E. 2012. Empowerment - fad or fab? A multilevel review of the past two decades of research. *Journal of Management*, 38: 1231-1281.
- McCauley, C. D., Ruderman, M. N., Ohlott, P. J., & Morrow, J. E. 1994. Assessing the developmental components of managerial jobs. *Journal of Applied Psychology*, 79: 544-560.
- Meade, A. W., & Craig, S. B. 2012. Identifying careless responses in survey data. *Psychological Methods*, 17: 437-455.
- Meir, E. I., & Melamed, S. 1986. The accumulation of person-environment congruences and well-being. *Journal of Occupational Behaviour*, 7: 315-323.
- Menon, S. T. 2001. Employee empowerment: an integrative psychological approach. *Applied Psychology: An International Review*, 50: 153-180.
- Miller, K. I., & Monge, P. R. 1986. Participation, satisfaction, and productivity: A meta-analytic review. *Academy of Management Journal*, 29: 727-753.
- Mills, P. K., & Ungson, G. R. 2003. Reassessing the Limits of Structural Empowerment: Organizational Constitution and Trust as Controls. *Academy of Management Review*, 28: 143-153.
- Mitchell-Stewart, A. 1994. *Empowering People*. London: Pitman.
- Morgeson, F. P., & Campion, M. A. 2003. Work design. In W. C. Borman, D. R. Ilgen, & R. J. Klimoski (Eds.), *Handbook of psychology: Industrial and organizational psychology*, Vol. 12: 423-452. Hoboken, NJ: John Wiley & Sons.
- Morrell, K., & Wilkinson, A. 2002. Empowerment: through the smoke and past the mirrors? *Human Resource Development International* 5: 119-130.
- Mossholder, K. W., Bedeian, A. G., & Armenakis, A. A. 1982. Group process-work outcome relationships: A note on the moderating impact of self-esteem. *Academy of Management Journal*, 25: 575-585.

- Murphy, S. A., Beaton, R. D., Cain, K., & Pike, K. 1995. Gender differences in fire fighter job stressors and symptoms of stress. *Women and Health*, 22: 55-69.
- Neider, L. L. 1980. An experimental field investigation utilizing an expectancy theory view of participation. *Organizational Behavior and Human Performance*, 26: 425-442.
- Nelson, D. L., & Quick, J. C. 1985. Professional women: Are distress and disease inevitable? *Academy of Management Review*, 10: 206-213.
- Parker, D. F., & Decotiis, T. A. 1983. Organizational determinants of job stress. *Organizational Behavior and Human Performance*, 32: 160-177.
- Parker, S. K., & Sprigg, C. A. 1999. Minimizing Strain and Maximizing Learning: The Role of Job Demands, Job Control, and Proactive Personality. *Journal of Applied Psychology*, 84: 925-939.
- Perrewe, P. L., & Zellars, K. L. 1999. An examination of attributions and emotions in the transactional approach to the organizational stress process. *Journal of Organizational Behavior*, 20: 739-752.
- Phares, E. J., Wilson, K. G., & Klyver, N. W. 1971. Internal-external control and the attribution of blame under neutral and distractive conditions. *Journal of Personality and Social Psychology*, 18: 285-288.
- Pierce, J. L., Gardner, D. G., Dunham, R. B., & Cummings, L. L. 1993. Moderation by organization-based self-esteem of role condition -- employee response relationships. *Academy of Management Journal*, 36: 271-288.
- Podsakoff, N. P., LePine, J. A., & LePine, M. A. 2007. Differential challenge stressor-hindrance stressor relationships with job attitudes, turnover intentions, turnover, and withdrawal behavior: a meta-analysis. *Journal of Applied Psychology*, 92: 438-454.
- Podsakoff, P. M., & MacKenzie, S. B. 1994. An examination of the psychometric properties and nomological validity of some revised and reduced substitutes for leadership scales. *Journal of Applied Psychology*, 79: 702-713.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. 2003. Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88: 879-903.
- Podsakoff, P. M., MacKenzie, S. B., & Podsakoff, N. P. 2012. Sources of method bias in social science research and recommendations on how to control it. *Annual Review of Psychology*, 63: 539-569.
- Randolph, W. A. 2000. Re-thinking empowerment: Why is it so hard to achieve? *Organizational Dynamics*, 29(2): 94-107.

- Raykov, T. 1997. Estimation of composite reliability for congeneric measures. *Applied Psychological Measurement*, 21: 173-184.
- Renn, R. W., & Vandenberg, R. J. 1991. Differences in employee attitudes and behaviors based on Rotter's (1966) Internal-External Locus of Control: Are they all valid? *Human Relations*, 44: 1161-1178.
- Richardson, H. A., & Taylor, S. G. 2011. The relationships of consultation, participation, and delegation with performance and deviance. Presented at the Academy of Management Meeting (Organizational Behavior Division) in San Antonio, Texas.
- Richardson, H. A., Yang, J., Vandenberg, R. J., Dejoy, D. M., & Wilson, M. G. 2008. Perceived organizational support's role in stressor-strain relationships. *Journal of Managerial Psychology*, 23: 789-810.
- Robbins, T. L., Crino, M. D., & Fredendall, L. D. 2002. An integrative model of the empowerment process. *Human Resource Management Review*, 12: 419-443.
- Rosenberg, M. 1965. *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press.
- Rosenberg, M. 1989. *Society and the adolescent self-image (Rev. ed.)*. Middletown, CT: Wesleyan University Press.
- Rotter, J. 1966. Generalized expectancies for internal versus external control of reinforcements. *Psychological Monographs*, 80: Whole No. 609.
- Schaubroeck, J., & Merritt, D. E. 1997. Divergent effects of job control on coping with work stressors: The key role of self-efficacy. *Academy of Management Journal*, 40: 738-754.
- Scherbaum, C. A., Cohen-Charash, Y., & Kern, M. J. 2006. Measuring general self-efficacy: A comparison of three measures using item response theory. *Educational and Psychological Measurement*, 66: 1047-1063.
- Schmitt, N., & Stults, D. M. 1985. Factors defined by negatively keyed items: The results of careless respondents? *Applied Psychological Measurement*, 9: 367-373.
- Schrage, M. 2001. More Power To Whom? "Empowerment" management techniques are a great way to spread the unhappiness. But which managers benefit is another question entirely, *Fortune*, July 23, 2001 ed.: CNN Money.
- Schriesheim, C. A., & Hill, K. D. 1981. Controlling acquiescence response bias by item reversals: The effect on questionnaire validity. *Educational and Psychological Measurement*, 41: 1101-1114.



- Schriesheim, C. A., Neider, L. L., & Scandura, T. A. 1998. Delegation and leader-member exchange: Main effects, moderators, and measurement issues. *Academy of Management Journal*, 41: 298-318.
- Seibert, S. E., Crant, J. M., & Kraimer, M. L. 1999. Proactive personality and career success. *Journal of Applied Psychology*, 84: 219-237.
- Seibert, S. E., Kraimer, M. L., & Crant, J. M. 2001. What do proactive people do? A longitudinal model linking proactive personality and career success. *Personnel Psychology*, 54: 845-875.
- Seibert, S. E., Silver, S. R., & Randolph, W. A. 2004. Taking empowerment to the next level: A multiple-level model of empowerment, performance, and satisfaction. *Academy of Management Journal*, 47: 332-349.
- Simmons, B. L., & Nelson, D. L. 2001. Eustress at Work: The relationship between hope and health in hospital nurses. *Health Care Manage Review*, 26: 7-18.
- Spector, P. E. 1982. Behavior in organizations as a function of employee's locus of control. *Psychological Bulletin*, 91: 482-497.
- Spector, P. E. 1986. Perceived control by employees: A meta-analysis of studies concerning autonomy and participation at work. *Human Relations*, 39: 1005-1016.
- Spector, P. E. 2006. Method variance in organizational research: Truth or urban legend? *Organizational Research Methods*, 9: 221-232.
- Spector, P. E., Dwyer, D. J., & Jex, S. M. 1988. Relation of job stressors to affective, health and performance outcomes: A comparison of multiple data sources. *Journal of Applied Psychology*, 73: 11-19.
- Spielberger, C. D., & Reheiser, E. C. 1994. The job stress survey: Measuring gender differences in occupational stress. *Journal of Social Behavior and Personality*, 9: 199-218.
- Spreitzer, G. M. 1995. Psychological empowerment in the workplace: Dimensions, measurement, and validation. *Academy of Management Journal*, 38: 1442-1465.
- Spreitzer, G. M. 1996. Social structural characteristics of psychological empowerment. *Academy of Management Journal*, 39: 483-504.
- Spreitzer, G. M., Kizilos, M. A., & Nason, S. W. 1997. A dimensional analysis of the relationship between psychological empowerment and effectiveness, satisfaction, and strain. *Journal of Management*, 23: 679-704.

- Stamper, C. L., & Johlke, M. C. 2003. The impact of perceived organizational support on the relationship between boundary spanner role stress and work outcomes. *Journal of Management*, 29: 569-588.
- Stanton, J. M. 2006. *The StudyResponse open recruitment method. (Tech. Rep. No. 13007)*. Syracuse, NY: Syracuse University, School of Information Studies.
- Strain, C. R. 1999. Perceived autonomy, need for autonomy, and job performance in retail salespeople. *Journal of Social Behavior and Personality*, 14: 259-265.
- Teisl, M. F., Roe, B., & Vayda, M. 2005. Incentive effects on response rates, data quality, and survey administration costs. *International Journal of Public Opinion Research*, 18: 364-373.
- Thomas, K., & Tymon, W. 1994. Does empowerment always work: Understanding the role of intrinsic motivation and personal interpretation. *Journal of Management Systems*, 6(2): 1-13.
- Thomas, K. W., & Velthouse, B. A. 1990. Cognitive elements of empowerment: An "interpretive" model of intrinsic task motivation. *Academy of Management Review*, 15: 666-668.
- Thompson, J. W. 1995. Leading to empowerment. *Electric Perspectives*, 20: 52-60.
- van der Doef, M., & Maes, S. 1999. The job demand-control(-support) model and psychological well-being: a review of 20 years of empirical research. *Work & Stress*, 13: 87-114.
- Van Dyne, L., & LePine, J. A. 1998. Helping and voice extra-role behaviors: Evidence of construct and predictive validity. *Academy of Management Journal*, 41: 108-119.
- Vitaliano, P. P., Russo, J., & Maiuro, R. D. 1987. Locus of control, type of stressor, and appraisal within a cognitive-phenomenological model of stress. *Journal of Research in Personality*, 21: 224-237.
- Vroom, V. H., & Jago, A. G. 1988. *The new leadership -- managing participation in organisations*. Englewood Cliffs, NJ: Prentice-Hall.
- Wageman, R. 1995. Interdependence and group effectiveness. *Administrative Science Quarterly*, 40: 145-180.
- Wagner, J. A., III. 1994. Participation's effects on performance and satisfaction: A reconsideration of research evidence. *Academy of Management Review*, 19: 312-330.
- Wagner, J. A., Leana, C. R., Locke, E. A., & Schweiger, D. M. 1997. Cognitive and motivational frameworks in U.S. research on participation: A meta-analysis of primary effects. *Journal of Organizational Behavior*, 18: 49-65.

- Wall, T. D., Cordery, J. L., & Clegg, C. W. 2002. Empowerment, performance, and operational uncertainty: A theoretical integration. *Applied Psychology: An International Review*, 51: 146-170.
- Wallace, C. J., Johnson, P. D., Mathe, K., & Paul, J. 2011. Structural and psychological empowerment climates, performance, and the moderating role of shared felt accountability: A managerial perspective. *Journal of Applied Psychology*, 96: 840-850.
- Wang, G., & Lee, P. D. 2009. Psychological empowerment and job satisfaction: An analysis of interactive effects. *Group & Organization management*, 34: 271-296.
- Warr, P. 1987. *Work, unemployment, and mental health*. Oxford: Clarendon Press.
- Weick, K. 1988. Enacted sensemaking in crisis situations. *Journal of Management Studies*, 25: 305-317.
- Weiner, B. 1974. *Achievement motivation and attribution theory*. Morristown, NJ: General Learning Press.
- Weiner, B. 1986. *An attributional theory of motivation and emotion*. New York: Springer-Verlag.
- Wilkinson, A. 1998. Empowerment: theory and practice. *Personnel Review*, 27(1): 40-56.
- Williams, L. J., & Anderson, S. E. 1991. Job satisfaction and organizational commitment as predictors of organizational citizenship and in-role behaviors. *Journal of Management*, 17: 601-617.
- Wolfe, L. M., & Robertshaw, D. 1982. Effects of college attendance on locus of control. *Journal of Personality and Social Psychology*, 43: 802-810.

## APPENDIX

### **Participation**

In this approach to decision-making, your supervisor shares a problem or issue with you and, through the exchange of information and ideas, *together* you analyze the problem/issue and arrive at a solution. You both contribute to the resolution of the problem/issue, with the relative contribution of each being dependent on knowledge rather than formal authority.

On average, how often does your supervisor ask you to participate in decisions about your personal job? Specifically, how frequently does your supervisor ask you to participate when making decisions about...

- What your personal job tasks should be?
- How you should perform your jobs tasks?
- What you are supposed to accomplish in your job?

On average, how often does your supervisor consult you about the management of your work unit? These kinds of decisions may not be a part of your formal job duties, but he/she may consult you about them anyway. Specifically, how frequently does your supervisor consult you when making decision about...

- How to improve the overall effectiveness of your work unit?
- Allocation of resources in your work unit?
- Managing others in your work unit?

### **Delegation**

In this approach to decision-making, your supervisor delegates a problem or issue to you, providing you with any relevant information he/she possesses, but gives you *full* responsibility for solving the problem or issue by yourself. Any solution you reach will receive your supervisor's support.

On average, how often does your supervisor delegate to you decisions about your personal job? Specifically, how frequently does your supervisor delegate to you decisions about...

- What your personal job tasks should be?
- How you should perform your jobs tasks?
- What you are supposed to accomplish in your job?

On average, how often does your supervisor delegate the management of your work unit to you? These kinds of decisions may not be a part of your formal job duties, but he/she may delegate them to you anyway. Specifically, how frequently does your delegate to you decisions about...

- How to improve the overall effectiveness of your work unit?
- Allocation of resources in your work unit?
- Managing others in your work unit?

### **Accountability**

1. I am held accountable for my actions at work.
2. I often have to explain why I do certain things at work.

3. My supervisor holds me accountable for all of my decisions.
4. If things at work do not go the way that they should, I will hear about it from my supervisor.
5. The success of my immediate work group rests on my shoulders.
6. The jobs of many people at work depend on my success or failures.
7. In the grand scheme of things, my efforts at work are very important.
8. Coworkers, subordinates, and bosses scrutinize my efforts at work.

### **Proactive personality**

1. I am constantly on the lookout for new ways to improve my life.
2. I feel driven to make a difference in my community, and maybe the world.
3. I tend to let others take the initiative to start new projects. (R)
4. Wherever I have been, I have been a powerful force for constructive change.
5. I enjoy facing and overcoming obstacles to my ideas.
6. Nothing is more exciting than seeing my ideas turn into reality.
7. If I see something I don't like, I fix it.
8. No matter what the odds, if I believe in something I will make it happen.
9. I love being a champion for my ideas, even against others' opposition.
10. I excel at identifying opportunities.
11. I am always looking for better ways to do things.
12. If I believe in an idea, no obstacle will prevent me from making it happen.
13. I love to challenge the status quo.
14. When I have a problem, I tackle it head-on.
15. I am great at turning problems into opportunities.
16. I can spot a good opportunity long before others can.
17. If I see someone in trouble, I help out in any way I can.

### **Locus of control**

1. I have usually found that what is going to happen will happen, regardless of my actions. (R)
2. Many times I feel that we might just as well make many of our decisions by flipping a coin. (R)
3. Getting a good job seems to be largely a matter of being lucky enough to be in the right place at the right time. (R)
4. It is difficult for ordinary people to have much control over what politicians do in office. (R)
5. It isn't wise to plan too far ahead because most things turn out to be a matter of good or bad fortune anyhow. (R)
6. When things are going well for me I consider it due to a run of good luck. (R)
7. Success is mostly a matter of getting good breaks. (R)
8. I think that life is mostly a gamble. (R)
9. There's not much use in worrying about things . . . what will be will be. (R)
10. Many times I feel that I have little influence over the things that happen to me. (R)
11. Success in dealing with people seems to be more a matter of the other person's moods and feelings at the time rather than one's own actions. (R)

### **Generalized self-efficacy**

1. I will be able to achieve most of the goals that I have set for myself.
2. When facing difficult tasks, I am certain that I will accomplish them.
3. In general, I think that I can obtain outcomes that are important to me.

4. I believe I can succeed at most any endeavor to which I set my mind.
5. I will be able to successfully overcome many challenges.
6. I am confident that I can perform effectively on many different tasks.
7. Compared to other people, I can do most tasks very well.
8. Even when things are tough, I can perform quite well.

### **Generalized self-esteem**

1. I feel that I am a person of worth, at least on an equal plane with others.
2. I feel that I have a number of good qualities.
3. All in all, I am inclined to feel that I am a failure. (R)
4. I am able to do things as well as most other people.
5. I feel I do not have much to be proud of. (R)
6. I take a positive attitude toward myself.
7. On the whole, I am satisfied with myself.
8. I wish I could have more respect for myself. (R)
9. I certainly feel useless at times. (R)
10. At times I think I am no good at all. (R)

### **Challenge and hindrance stress**

#### Challenge Stressors

1. The number of projects and or assignments I have.
2. The amount of time I spend at work.
3. The volume of work that must be accomplished in the allotted time.
4. Time pressures I experience.
5. The amount of responsibility I have.
6. The scope of responsibility my position entails.

#### Hindrance stressors

1. The degree to which politics rather than performance affects organizational decisions.
2. The inability to clearly understand what is expected of me on the job.
3. The amount of red tape I need to go through to get my job done.
4. The lack of job security I have.
5. The degree to which my career seems "stalled."

### **Anxiety**

1. I have felt fidgety or nervous as a result of my job
2. My job gets to me more than it should
3. There are lots of times when my job drives me right up the wall
4. Sometimes when I think about my job I get a tight feeling in my chest
5. I feel guilty when I take time off from job

### **Somatic symptoms**

How often have you experienced any of the following during the past month?

1. You were bothered by a headache.
2. You felt as if blood were rushing to your head.
3. You felt a lump in your throat or a choked up feeling.
4. Your hands trembled enough to bother you.

5. You were bothered by shortness of breath when you were not working hard or exercising.
6. You were bothered by your heart beating hard.
7. Your hands felt damp or clammy.
8. You had spells of dizziness.
9. You were bothered by having an upset stomach or stomach ache.
10. You were in ill health, which affected your work.

### **Task Performance**

1. Adequately completes assigned duties.
2. Fulfills responsibilities specified in job description.
3. Performs tasks that are expected of him/her.
4. Meets formal performance requirements on the job.
5. Engages in activities that will directly affect his/her performance evaluation.
6. Neglects aspects of the job he/she is obligated to perform. (R)
7. Fails to perform essential duties. (R)

### **Psychological empowerment**

1. The work I do is very important to me.
2. My job activities are personally meaningful to me.
3. The work I do is meaningful to me.
4. I am confident about my ability to do my job.
5. I am self-assured about my capabilities to perform my work activities.
6. I have mastered the skills necessary for my job.
7. I have significant autonomy in determining how I do my job.
8. I can decide on my own how to go about doing my job.
9. I have considerable opportunity for independence and freedom in how I do my job.
10. My impact on what happens in my unit is large.
11. I have a great deal of control over what happens in my unit.
12. I have significant influence over what happens in my unit.

(R) – Reverse coded items

## VITA

Yun-Chen Tsai Morgan, a native of Taipei, Taiwan, received her bachelor's degree in management and her master of business administration from Southeastern Louisiana University in Hammond, Louisiana. Recognized for her teaching throughout her doctoral program at LSU, she was awarded the 2006-2007 James W. Reddoch Award for teaching excellence by a doctoral student in the Department of Management. Yun-Chen's research interests include structural and psychological empowerment, challenge and hindrance stress, and employee well-being in the workplace.