RE-CONCEPTUALIZATION OF PSYCHOLOGICAL EMPOWERMENT

by

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(Under the Direction of Robert J. Vandenberg)

ABSTRACT

This dissertation provides a re-conceptualization of the construct of psychological empowerment. This effort is motivated by the observation that the definition proposed by Thomas and Velthouse (1990), which is frequently used in the organizational behavior literature, has some conceptual shortcomings. Based on the research on the behavioral approach/inhibition theory of power, psychological empowerment is conceptualized as a psychological state in which individuals are aware that they have the freedom to take the responsibility for and to have influence over the ideas, decisions, actions, and standards of quality in undertaking their areas of job duties. Further, a measurement scale was developed for this new construct with data from two organizations. This measurement scale demonstrated acceptable psychometric properties. A theoretical model of psychological empowerment was also tested. Implications for theory development and practices are discussed.

INDEX WORDS: Psychological empowerment, conceptualization, scale development

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B.B.A., The Chinese University of Hong Kong, 2000
M. Phil., The Chinese University of Hong Kong, 2002

A Dissertation Submitted to the Graduate Faculty of The University of Georgia in Partial

Fulfillment of the Requirements for the Degree

DOCTOR OF PHILOSOPHY

ATHENS, GEORGIA

2006

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August 2006

ACKNOWLEDGMENTS

There are several professors to whom I am grateful. First, I want to sincerely thank Bob Vandenberg for being such a wonderful major professor. He gave me the opportunity to pursue this career. He always has faith in me and is patient with me. More importantly, he treats me as a friend, which has made the graduate student life less stressful. I cannot ask for a better major professor. Ann Buchholtz, the graduate coordinator, is doctoral students' guardian angel. We are never lost or down because of Ann's support and encouragement. Even if she does not say a word, just being around her makes me feel positive and comfortable. She is truly the most considerate person I have ever met. I also want to thank Daniel Feldman. Daniel is the most knowledgeable, professional, and enlightening scholar I have known. His words are always full of wisdom, and I learned a lot through collaborating with him and through daily interactions with him. Last but not least, I also want to thank Lillian Eby and Chuck Lance. They show genuine concerns about my career and have taught me a lot of things, both professionally and personally.

There are several other people I also want to thank. First of all, my parents are incredibly supportive when they knew that I had to leave home for a long period of time. I also need to thank my brother and sister, my friends, and my doctoral student cohort, all of whom have provided tangible and emotional support for me to go through these years. Without the support from these people, finishing the graduate program would have been ten times harder. Finally, the Department of Management also provided with me a great deal of support. Roscoe Davis, the previous department chair, and Daniel Feldman, the interim chair, have helped all the doctoral students obtain the maximum support possible in terms of resources and financial aids.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER I

INTRODUCTION

Employee empowerment has been discussed in various forms within the organizational sciences for decades (Forrester, 2000). Vogt and Murrell (1990) observed that the roots of employee empowerment may be traced back to as early as the 1950s when the interest in individuals' work motivation and well-being began to grow. The underlying premise of employee empowerment is that when employees are given the freedom to make decisions and commitments about their jobs, they may be more effective and feel better about their jobs and themselves (Bowen & Lawler, 1992). Some of the common empowerment policies and practices include flattened organizational structure, enhanced workplace communication, climate of respect, trust, and supportiveness, team work, information distribution, job autonomy, and profit sharing (Kanter, 1977; Lin, 2002; Matthews, Diaz, & Cole, 2003; Vogt & Murrell, 1990; Zimmerman, 2000). However, some researchers observe that the supposedly positive effects of empowerment policies and practices on employees are often not fully seen (e.g., Argyris, 1998; Forrester, 2000; Griggs & Manring, 1991; Thorlakson & Murray, 1996). Few researchers, however, have addressed why.

Thomas and Velthouse's (1990) work represented an important step to explain the lack of full effectiveness of empowerment policies and practices. Specifically, they propose a psychological perspective of empowerment based on the premise that empowerment policies and practices would not be effective if employees do not interpret them as empowering. They define *psychological empowerment* as employees' intrinsic task motivation manifested in four job-

related cognitions: meaningfulness, competence, choice, and impact. Using various operationalizations of this definition, researchers found that psychological empowerment predicted work outcomes, including employees' job satisfaction, job involvement, organizational commitment, occupational turnover intention, work strains, innovativeness, leadership behaviors, and job performance (Avolio, Zhu, Koh, & Bhatia, 2004; Koberg, Boss, Senjem, & Goodman, 1999; Kraimer, Seibert, & Liden, 1999; Laschinger, Finegan, Shamain, & Wilk, 2004; Liden, Wayne, & Sparrowe, 2000; Seibert, Silver, & Randolph, 2004; Spreitzer, 1995; Spreitzer, Janasz, & Quinn, 1999; Spreitzer, Kizilos, & Nason, 1997). Thus, as proposed by Thomas and Velthouse (1990), psychological empowerment appears to have some validity at least in terms of association with other criteria.

"At least" is underscored above to emphasize that closer scrutiny of Thomas and Velthouse's (1990) definition is warranted. The call for closer scrutiny should not be interpreted to imply that Thomas and Velthouse's (1990) definition of empowerment and its use in research has been wrong. In fact, their work has guided researchers to help increase our understanding of a variety of workplace phenomena such as job attitude formulation, job performance, and job stress (e.g., Spreitzer et al., 1997). However, some subsequent studies highlight a need for closer scrutiny of their definition of psychological empowerment. More specifically, there are mainly three conceptual flaws in their definition. They are (a) conceptual ambiguities and problems with the linkage to intrinsic task motivation, (b) questionable dimensionality of psychological empowerment, and (c) interpretational difficulty of the nomological network. These three conceptual flaws are briefly discussed below.

First, there are conceptual ambiguities and problems linking psychological empowerment to intrinsic task motivation. Thomas and Velthouse (1990) emphasize that psychological

empowerment is a motivational construct. That is, those who are psychologically empowered are intrinsically motivated to work on job tasks. However, defining psychological empowerment in terms of intrinsic task motivation may be somewhat questionable because intrinsic task motivation may be argued as an outcome of empowerment too (e.g., Gagne, Senecal, & Koestner, 1997). For instance, it can be argued that those who are empowered are consequently more motivated because they feel more psychologically resourceful than those who are not empowered. Therefore, defining psychological empowerment in terms of intrinsic task motivation lacks strong theoretical and empirical support.

The second conceptual flaw associated with Thomas and Velthouse's (1990) definition lies in its questionable dimensionality. Specifically, the dimensions proposed by Thomas and Velthouse (1990) may not necessarily be accurate or complete. For instance, some researchers believe that competence, one of the dimensions of psychological empowerment according to Thomas and Velthouse (1990), is an antecedent of empowerment (Liden & Arad, 1996). When people feel competent, they should be more intrinsically motivated to work on job tasks than when they believe that they cannot excel. Others, on the other hand, propose that competence is an outcome of empowerment (e.g., Cheung, Mok, Cheung, 2005; Ozer & Bandura, 1990) because those who are empowered often feel more ready and therefore believe that they can perform well on the task. Thus, whether the dimensions proposed by Thomas and Velthouse (1990) are the core essence, antecedents, or outcomes of psychological empowerment is still debatable.

The third conceptual flaw in Thomas and Velthouse's (1990) definition is the interpretational difficulty of its nomological network, which stems from the fact that the four dimensions are often related to the same outcomes quite differently (e.g., Kraimer et al., 1999;

Liden et al., 2000; Spreitzer et al., 1997). This may mean that in some circumstances, researchers need to base explanation and prediction on one dominant dimension (e.g., competence), but on another dimension (e.g., impact) in another circumstance, a strategy that is theoretically unappealing and confusing. This conceptual flaw raises doubts about whether the four dimensions should be treated as a collective to represent psychological empowerment.

Overall, while recognizing that Thomas and Velthouse's (1990) work has brought us to a certain level of conceptual development, researchers are increasingly highlighting the shortcomings of their definition. Because psychological empowerment has the potential to predict a number of work outcomes (e.g., Spreitzer, 1997) and mediate important work relationships (e.g., Avolio et al., 2004; Carless, 2004; Seibert et al., 2004), there is a need to more clearly spell out the definition and content domains of this construct. A clear and agreed-upon definition of psychological empowerment provides a foundation upon which theories in this research area can be built (e.g., Kirkman & Rosen, 1999; Seibert et al., 2004).

Addressing this need, the central purposes of this study are to (a) provide a re-conceptualization of the construct of psychological empowerment, (b) develop and test a new measurement scale for the new definition, and (c) examine a theoretical model that includes some major antecedents and outcomes of psychological empowerment (as operationalized by the new measurement scale). This re-conceptualization is built upon several streams of research, extending the theoretical richness of Thomas and Velthouse's (1990) work. First of all, the re-conceptualization retains the positive features of Thomas and Velthouse's (1990) definition. These positive features include (a) an emphasis on psychological processes, and (b) an emphasis on a sense of choice in empowered individuals. The psychological perspective of empowerment proposed by Thomas and Velthouse (1990) is an important advancement because it is logical to

believe that empowerment policies and practices may not have full effects if employees do not feel that they are empowered (Menon, 2001). Second, Thomas and Velthouse's (1990) assertion that psychological empowerment is partly represented by employees' sense of choice is theoretically sound and agreed by other empowerment researchers (e.g., Carless, 2004; Liden & Arad, 1996; Mills & Ungson, 2003). These two features, therefore, should be retained in the new definition of psychological empowerment.

Besides retaining the positive features of Thomas and Velthouse's (1990) definition, the current re-conceptualization of psychological empowerment is grounded in other streams of research. Specifically, research on cognitive awareness as well as the behavioral approach/inhibition theory of power (Keltner, Gruenfeld, & Anderson, 2003) is used as the theoretical guide. Researchers suggest that empowerment experiences often involve one's cognitive state of awareness (Vogt & Murrell, 1990), such as awareness of personal strengths and weaknesses (Falk-Rafael, 2001). Therefore, research on cognitive awareness may be helpful for building the new definition of psychological empowerment.

Further, research on power, especially in the social psychology (e.g., Keltner et al., 2003), provides an important foundation to develop a new definition of psychological empowerment because psychological empowerment is essentially the psychological experiences of possession of more power in a social environment. Therefore, understanding power from a social-psychological perspective should be highly instrumental to underscoring the content domain of psychological empowerment. The behavioral approach/inhibition theory of power (Keltner et al., 2003) informed such a perspective.

Overall, the various streams of research lead to the following new definition of psychological empowerment. It is a psychological force anchoring individuals' expectations

regarding the performance of their areas of responsibilities. The force is experienced as *a psychological state in which individuals are aware that they have the freedom to take responsibility for and have influence over the ideas, decisions, actions, and standards of quality in undertaking their areas of job duties.* This definition of psychological empowerment retains the positive features of Thomas and Velthouse's (1990) definition, contains the proximal elements representing the psychological experience of being empowered, and is theory-grounded. This dissertation discusses in detail how the new definition is derived. Further, empirical investigations of the validity of the operationalization of this new definition as well as its relationships with some major work variables in empowerment research are performed and presented. The implications for research and practice of the new definition of psychological empowerment are also discussed.

Organization of Dissertation

More specifically, this dissertation is organized as follows:

Chapter II provides a review of the literature on the theoretical nature of psychological empowerment. Structural empowerment, the traditional perspective of empowerment before Thomas and Velthouse's (1990) work, is discussed first. Following that, Thomas and Velthouse's (1990) perspective of psychological empowerment, along with other important studies in this research area (Conger & Kanungo, 1988; Spreitzer, 1995; 1996), are discussed.

Chapter III outlines three major conceptual flaws associated with their definition. As mentioned earlier, they are (a) conceptual ambiguities and problems with the linkage to intrinsic task motivation, (b) questionable dimensionality of psychological empowerment, and (c) interpretational difficulty of the nomological network. These flaws together highlight the need to identify a new definition of psychological empowerment.

Chapter IV describes a new definition of psychological empowerment. This definition extends the positive features of Thomas and Velthouse's (1990) definition and overcomes the conceptual flaws highlighted in Chapter III. Research on cognitive awareness as well as the behavioral approach/inhibition theory of power (Keltner et al., 2003) is used as the theoretical guide. In the second part of this Chapter, the new definition is compared with that of Thomas and Velthouse (1990) in detail. In the third part of this Chapter, multiple hypotheses related to different aspects of validity of the new definition of psychological measurement are proposed.

Chapter V describes the methods and analytical procedures to operationalize the new definition. These include the nature of the samples, the research settings, the measurement scales used, and the analysis strategies.

Chapter VI discusses the results of the empirical investigation of the validity of the new scale of psychological empowerment. They include the internal consistency estimate (or the extent to which scale items are closely related), convergent validity (or the extent to which the scale is related to measures of similar constructs), discriminant validity (or the extent to which the scale is distinct from measures of different constructs), and nomological validity (or the extent to which the scale is related to important variables of interest). Finally, the role of psychological empowerment in a theoretical model is examined.

Chapter VII describes the key findings, contributions, implications for future research and practice, and limitations of this study.

CHAPTER II

REVIEW OF LITERATURE

The purpose of this Chapter is to review the literature on psychological empowerment. Specifically, those studies that examine the theoretical nature of the construct are discussed. This effort provides a preliminary understanding of the history of the development of psychological empowerment as an important psychological construct within the organizational sciences. This understanding also lays the groundwork for discussing the conceptual flaws in Thomas and Velthouse's (1990) definition of psychological empowerment in the next Chapter.

With regard to the definition of empowerment, researchers notice that the "true" definition has been elusive. For instance, Cooney (2004) comments that "for all the discussion of empowerment there is no settled idea of what it actually is" (p. 677). Similarly, Vardi (2000) observes that "conceptually and empirically it [empowerment at work] has been quite unclear" (p. 1083). Menon (2001) states that "the diversity of thinking on empowerment has resulted in some ambiguity with regard to the nature of the empowerment construct" (p. 154). Randolph (2000) comments that "[t]o date, empowerment remains one of the most promising, yet mystifying, concepts in business" (p. 94). Finally, Gagne et al. (1997) make a similar observation that the nature of empowerment "has been open to debate" (p. 1222).

Therefore, while recognizing that Thomas and Velthouse's (1990) work has brought us to a certain level of conceptual development, the previous quotes illustrate, however, that it may have reached a limit. Among the various definitions of empowerment in the literature, Liden and Arad's (1996) definition is one of the most intuitive ones. They suggest that "[i]n organizational setting empowerment refers to power provided to organizational participants who previously did

not possess power" (p. 206). This transfer of power is often executed through management policies and practices, a process commonly called *structural empowerment*.

Empowerment Perspectives

Structural Empowerment

Structural empowerment is a process variable (Menon, 2001). It refers to the granting of greater autonomy and decision authority to employees through management policies and practices (e.g., Blau & Alba, 1982; Mainiero, 1986). Kanter (1977) suggests that power at work, in part, emanates from formal organizational systems. Astley and Sachdeva (1984) also suggest that power stems from sources such as hierarchical authority and control of resources. Because power is often derived from formal organizational systems, employee empowerment may be best attained through those management policies and practices that legitimize employees' increased power at work. These policies and practices, for example, include participative decision making, feedback system, opinion surveys, and job enrichment. Thus, empowerment as originally envisioned was often seen as a consequence of management policies and practices.

There are multiple reasons for the rising use of empowerment policies and practices at work (Conger & Kanungo, 1988). First, superiors' sharing of power with subordinates may increase organizational productivity (Kanter, 1979). Moreover, researchers observe that empowering employees is particularly needed in a team environment (Neilsen, 1986), an operational mode that is increasingly adopted in organizations. Further, leadership studies suggest that empowering employees is an important leadership skill and an indicator of managerial effectiveness (e.g., McClelland, 1975). In fact, managers or leaders play a key role in structural empowerment (Lin, 2002). They are often the parties that exercise the implementations of various empowerment polices and practices. Further, the leadership

literature documents the importance of energizing and empowering followers to act according to organizational goals (e.g., Yukl, 1989). They also represent a source of social support to instill comfort and confidence in followers to sustain setbacks, pursue intellectually exciting ideas, and take on difficult challenges in the process of empowerment (Burke, 1986; Koberg et al., 1999).

A number of specific management policies and practices are used to empower employees. Perhaps the most frequently used one is participative decision making (Glew, O'Leary-Kelly, Griffin, & Van Fleet, 1995). In participative decision making, employees are members of the decision making teams. Because decision making indicates authority and also allows an opportunity to affect outcomes, employees' power at work is increased. However, reviews of empirical studies on participative decision making show that this empowerment approach has only limited effects on employees' job attitudes and performance (e.g., Locke, Schweiger, & Latham, 1986; Wagner, 1994). One of the reasons may be that employees do not necessarily perceive that participation in decision making means having more power if they are only allowed to make decisions in some organizationally sanctioned occasions (Liden & Arad, 1996).

Another structural empowerment approach is job design. Hackman and Oldham (1975; 1980) study extensively how job design would affect work outcomes. They propose that jobs that are high on skill variety, task identity, task significance (importance), autonomy, and feedback are likely to result in three critical psychological states: experienced meaningfulness of the work, experienced responsibility for outcomes of the work, and knowledge of the results of the work. These three psychological states are likely to increase internal motivation, performance, and positive job attitudes. These relationships received robust support in empirical studies (Fried & Ferris, 1987). Therefore, working on a job that is important, autonomous, and challenging is an effective approach to empowerment.

Because of the increasing use of teams in organizations, it is not surprising that another structural empowerment approach is to organize self-management work teams (Cooney, 2004). These teams are composed of members equipped with competent skills to solve most work problems, and supervision of the team is minimal. They have control over a variety of work aspects including meeting schedules, pace of work, allocation of tasks among members, and recruitment and training of new members (Liden & Arad, 1996). However, similar to participative decision making, this empowerment approach demonstrates only limited positive effects on employees' performance and job attitudes (Wall, Kemp, Jackson, & Clegg, 1986), perhaps because it is the team as a whole rather than individuals themselves that enjoy the control rendered by management.

Vogt and Murrell (1990) summarize a number of possible structural empowerment interventions, that is, structural characteristics that facilitate employee empowerment. They are described in Table 1.

Some of these empowerment interventions have stronger potential to succeed than others. Bowen and Lawler (1992) summarize the success principles in structural empowerment. They suggest that to successfully empower employees, employees should get information about organizational performance (e.g., through feedback systems, flatter organizational structures), be rewarded for contributing to organizational performance (e.g., through pay-for-performance, goal-setting), have the knowledge and skills to understand and contribute to organizational performance (e.g., through training and development), and have the power to make decisions that influence organizational direction and performance (e.g., through participative decision making). In short, their recommendation is that when employees have power, information, reward, and knowledge, they are successfully empowered to contribute to organizational effectiveness.

TABLE 1: Structural Empowerment Interventions

Possible structural empowerment interventions
• Flattening of the hierarchy • Emergent organic structures • Decentralization as appropriate • Team and temporary group models of organization • Open communication channels • Bridges among all organizational levels • Smooth work-flow patterns that allow for quality, innovation, and creativity • Open-access information systems • Built-in assessment systems • Regular use of participative structures • Increased availability of and access to resources • Adhocracy as a creative alternative to bureaucracy • Interdependence/network norms • Commitment to responding to external circumstances and a strategy for continually scanning the environment. • Staffing patterns that reflect empowerment values (not traditional status differentials) • Management-development activities • First-line supervisory training • Policies and procedures supporting empowerment values • Technical education, re-education, and information programs at all levels • Profit sharing • Consideration of the alternative of an all-salaried work force • Stress-management and wellness programs • Employee-involvement programs • Partnership orientation in labor relations and union negotiations • External assessment programs • Work design reflecting collaborative teams • Job-enrichment experiments • Creative use of sponsorships, role models, peer alliances, and mentoring • Organizational orientation and socialization programs • Reward systems (promotions, special privileges, praise, money) that build “win-win” rather “win-lose” attitudes • Planned-change program (survey-research activities for all constituencies) • Periodic reviews of organizational structure • Individualized career-development plans (including career ladders) • Benefit packages reflecting company expectations and employee needs • Programs focused on life cycle of work groups: selection, orientation, training and development, working, assessment, and leaving • Employee participation in writing job descriptions and standards • Employee-assistance programs • Modeling of empowerment behavior in all programs

While the structural approach of empowerment demonstrates success sometimes (Lin, 2002), some researchers observe that the supposedly positive effects of empowerment policies and practices on employees are often not fully seen (e.g., Argyris, 1998; Forrester, 2000; Griggs & Manring, 1991; Thorlakson & Murray, 1996). This may be due to one major shortcoming in the structural approach. Namely, it ignores employees' interpretation of these policies and practices. This omission may be problematic because if employees do not perceive those empowerment policies and practices administered by organizations as empowering, they are unlikely to form attitudes and perform behaviors that are supposedly resulting from empowerment (Menon, 2001). This omission drives researchers to fill this gap by examining the detailed psychological processes by which structural empowerment has effects on employees and organizations. Conger and Kanungo (1988) are among the first to make this attempt. Their work is discussed in the next section.

Summary. Overall, this section contains the following main points.

- Structural empowerment is the granting of power to employees through management policies and practices.
- A large number of policies and practices can reinforce employee empowerment, such as participative decision making, job enrichment, and autonomous teams.
- Bowen and Lawler (1992) emphasize that employees are empowered when they have power, information, reward, and knowledge.
- One major drawback of the structural approach is that it ignores employees' interpretations or cognitions of the empowerment policies and practices.

Conger and Kanungo's Research

Conger and Kanungo (1988) observed that the structural empowerment perspective limited our understanding of the nature of empowerment because it solely focuses on managerial techniques and largely neglects the processes underlying empowerment. Their work, therefore, aims at directing researchers' attention to the detailed psychological processes by which empowerment occurs.

They suggest that there are at least two different ways to construe the notion of empowerment. First, empowerment can be viewed as a relational construct, representing organizations' or managers' willingness to share their power with employees. This willingness may be reciprocated by employees' greater emotional engagement in their relationships with the organizations or managers as well as greater work involvement. Second, empowerment may be viewed as a motivational construct. This latter perspective was taken by Conger and Kanungo (1988) as the focus of their article because they believe that employees' proximal reaction to empowerment is an increase in self-efficacy, a motivational construct commonly examined in the social sciences (Bandura, 1986).

Specifically, they suggest that empowerment is best viewed as a motivational construct because empowerment is meant to enable (rather than simply to delegate) (Conger and Kanungo, 1988; Vogt & Murrell, 1990). Therefore, they define empowerment "as a process of enhancing feelings of self-efficacy among organizational members through the identification of conditions that foster powerlessness and through their removal by both formal organizational practices and informal techniques of providing efficacy information" (p. 474).

Based on this definition, they propose that there are five stages in the process of empowering employees (Figure 1).

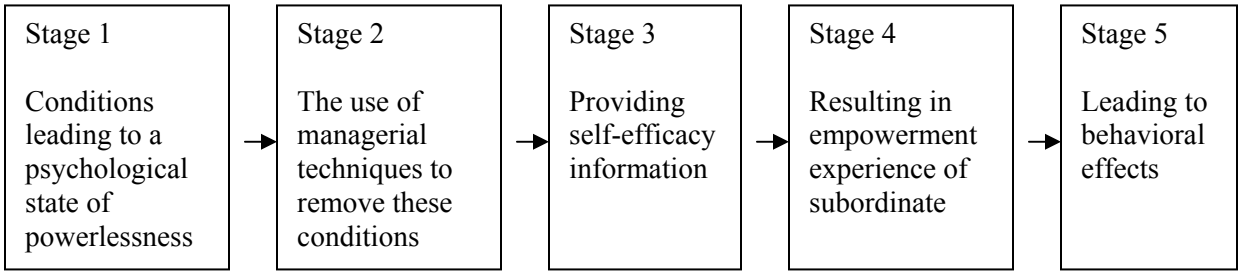

FIGURE 1: Conger and Kanungo's (1988) Process Model of Empowerment

At stage one, organizations must identify the conditions in the work environment that can lead to a psychological state of powerlessness. These circumstances include organizational changes and transitions (e.g., loss of key personnel), lack of reward systems, poor nature of jobs (e.g., repetitive jobs), and managers' tight span of control. Once such conditions leading to perceptions of powerlessness are identified, the next stage is to use management practices (e.g., goal setting, job enrichment, participative management) for the removal of these perceptions.

The third stage is to provide self-efficacy information to subordinates through four channels: mastery experience, vicarious experience, verbal persuasion, and emotional arousal. According to Bandura (1986), individuals' sense of self-efficacy can be enhanced through being successful at the tasks (mastery experience), observing others successfully doing the tasks (vicarious experience), being verbally convinced or encouraged (e.g., by supervisors) that they can do well (verbal persuasion), and not being excessively stressed, fearful, anxious, and depressed (emotional arousal).

Once self-efficacy is enhanced, this should result in an increase in the effort-performance expectancy. According to Vroom's (1964) expectancy theory, a stronger perception of the

relationship between efforts and performance directly increases one's motivation to dedicate efforts to the job. In other words, an increase in self-efficacy through organizations' empowerment should increase employees' motivation to work, manifested in greater initiation at work and higher persistence of behavior to accomplish task objectives (the last stage in Conger and Kanungo's model).

In sum, Conger and Kanungo (1988) suggest that little empirical work in the research area of empowerment may be due to the lack of a theoretical understanding of the processes underlying empowerment. Their conceptual model highlights the structural and psychological components involved. Specifically, they suggest that empowerment policies and practices (the structural components) are important for removing perceptions of powerlessness in the workplace and enhancing employees' sense of competence or self-efficacy (the psychological component). Overall, Conger and Kanungo's (1988) conceptual work directed researchers to begin looking at the psychological process of empowerment.

Summary. Overall, this section contains the following main points.

- Conger and Kanungo (1988) are among the first to bring researchers' attention to the psychological processes underlying structural empowerment.
- They emphasize that empowerment is closely related to employees' sense of competence. The major psychological change through empowerment is an increase in this sense of competence.

Thomas and Velthouse's Research

To more fully address the omission in the structural approach (which is the fact that it ignores employees' interpretation of empowerment policies and practices), Thomas and Velthouse (1990) proposed an interpretative approach to examining empowerment that is

psychological. It is their work that formally directs researchers to attend to the psychological processes by which empowerment policies and practices are translated into employees' attitudes and behaviors. Understanding these psychological processes is critical because they help explain how empowerment policies and practices can potentially bring positive outcomes for individuals and organizations, and also why they are not effective sometimes (Argyris, 1988; Forrester, 2000; Griggs & Manring, 1991; Thorlakson & Murray, 1996).

More specifically, Thomas and Velthouse (1990) define psychological empowerment as an intrinsic task motivation. They suggest that intrinsic task motivation is essentially the same as intrinsic work motivation examined by other researchers (e.g., Brief & Aldag, 1977) but at the level of analysis of individual tasks or projects. Those who are psychologically empowered, therefore, are those who are motivated to work on their job tasks. The source of intrinsic task motivation stems from employees' evaluations of the features of their job tasks; if a positive evaluation results, an increase in intrinsic task motivation is expected. The goal of employee empowerment is, then, to make employees have more favorable evaluations of their job tasks by, for example, modifying work conditions (e.g., increasing job autonomy). Conversely, empowerment policies and practices may not necessarily be effective if employees do not have cognition of these conditions and interpret these conditions in a favorable light because intrinsic task motivation is not enhanced.

Further, adding to Conger and Kanungo's (1988) initial thinking, Thomas and Velthouse (1990) suggest that sense of competence is only one of the four core elements representing empowerment experiences. They posit that the four core cognitions of meaningfulness, competence, choice, and impact collectively and fully represent psychological empowerment. In other words, psychologically empowered employees are those who are intrinsically motivated

through a favorable assessment of meaningfulness, competence, choice, and impact associated with their jobs. This assertion represents an important step toward a stronger understanding of how employee empowerment works as it outlines more specifically the psychological processes by which empowerment policies and practices (structural empowerment) may affect employees and subsequently organizational outcomes. Figure 2 contrasts the structural and psychological approaches.

The structural approach (e.g., Blau & Alba, 1982; Mainiero, 1986) (the upper panel) assumes that empowerment policies and practices directly elicit empowerment outcomes (e.g., productivity) and largely ignores the processes by which this relationship occurs. Alternately, the psychological approach proposed by Thomas and Velthouse (1990) (the lower panel) complements the structural approach and suggests that if empowerment policies and practices elicit favorable perceptions of meaningfulness, competence, choice, and impact, then positive behaviors (e.g., flexibility, activity, initiative) are likely to be performed, therefore resulting in positive organizational outcomes (Liden & Arad, 1996).

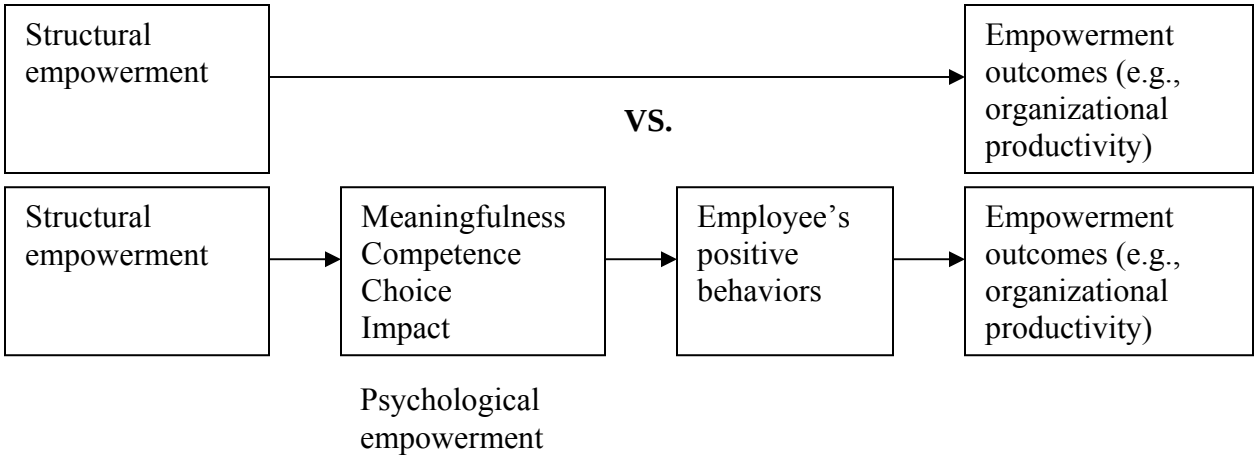

Figure 2: The Structural versus Psychological Empowerment Perspective

The dimension of *meaningfulness* is concerned with "the value of the task goal or purpose, judged in relation to the individual's own ideals or standards. In other words, it involves the individual's intrinsic *caring* [italics in the original text] about a given task" (Thomas & Velthouse, 1990, p. 672). They suggest that meaningfulness represents an investment of psychological energy with respect to work tasks. When employees perceive greater meaningfulness of a work task, they should invest greater psychological energy.

The dimension of *competence* addresses "the degree to which a person can perform task activities skillfully when he or she tries" (Thomas & Velthouse, 1990, p. 672). It is essentially synonymous to the construct of self-efficacy (Bandura, 1986). Those who believe that they can master their work tasks should be intrinsically motivated to work harder and persevere when facing setbacks. Conversely, those who do not believe that they are competent at their tasks may easily feel helpless and therefore lack an intrinsic task motivation. Thus, the stronger one's sense of competence, the stronger one's psychological empowerment.

The dimension of *choice* is concerned with "causal responsibility for a person's actions; it is what deCharms (1968) termed *locus of causality* [italics in the original text]" (Thomas & Velthouse, 1990, p. 673). Thus, this dimension represents a person's belief about whether his or her behavior is self-determined. Those who have a strong sense of choice are likely to demonstrate greater initiative, resiliency, and self-regulatory efforts than those with a weak sense of choice. Overall, the stronger one's sense of choice, the stronger one's psychological empowerment.

The last dimension of *impact* is concerned with "the degree to which behavior is seen as "making a difference" in terms of accomplishing the purpose of the task, that is, producing intended effects in one's task environment" (Thomas & Velthouse, 1990, p. 672). The authors

related this dimension to universal learned helplessness (which occurs when a person feels that s/he is not impactful, regardless of his or her performance). Those who perceive their jobs or work roles as impactful should assume for themselves greater responsibility and will therefore have stronger psychological empowerment than those who perceive their jobs or work roles as unimportant.

Table 2 summarizes these four dimensions.

Finally, Thomas and Velthouse (1990) suggest that psychological empowerment can also lead to positive behavioral outcomes. They emphasize behavioral consequences including behavioral activity, concentration, initiative, resiliency, and flexibility. That is, compared to others, those who are psychologically empowered are more likely to assume an active work role, concentrate at work, take initiative in different aspects of their jobs, be persistent in the face of setbacks or stressful situations, and be flexible in approach to their work tasks. These positive behavioral consequences may contribute to stronger organizational effectiveness.

Summary. Overall, this section contains the following main points.

- Thomas and Velthouse (1990) formally direct researchers' attention to the construct of psychological empowerment.
- They propose that psychological empowerment is a psychological state, characterized by four cognitions: meaningfulness, competence, choice, and impact.
- They suggest that these four dimensions collectively represent employees' intrinsic task motivation. That is, those who are psychologically empowered through these four cognitions are intrinsically motivated to work on job tasks.
- Psychological empowerment would lead to positive behavioral outcomes.

TABLE 2: The Four Dimensions of Psychological Empowerment

Dimension	Definition
Meaningfulness	The value of the task goal or purpose, judged in relation to the individual's own ideals or standards. In other words, it involves the individual's intrinsic caring about a given task
Competence	The degree to which a person can perform task activities skillfully when he or she tries
Choice	Causal responsibility for a person's actions; it is a locus of causality; autonomy at work
Impact	The degree to which behavior is seen as "making a difference" in terms of accomplishing the purpose of the task, that is, producing intended effects in ones' task environment

Spreitzer's Empirical Studies

While Thomas and Velthouse's (1990) thinking was imperative and innovative, it was not until Spreitzer's (1995;1996) work that empirical examinations of the construct of psychological empowerment started to cumulate. Spreitzer (1995; 1996) extends Thomas and Velthouse's (1990) work in two important ways: (a) she provides an operationalization of Thomas and Velthouse's (1990) definition of psychological empowerment, and (b) she provides preliminary evidence of the nomological validity of psychological empowerment.

Specifically, Spreitzer (1995) created operationalizations of the four dimensions of meaningfulness, competence, choice, and impact. The scale items were adapted from scales that measure similar content domains in the literature (Ashforth, 1989; Hackman & Oldham, 1975; Jones, 1986; Tymon, 1988). Further, she empirically tested and found support for the validity of the multidimensional conceptualization of psychological empowerment. With two samples of

employees, she found that a second-order latent construct represented by four first-order latent constructs (the four core dimensions of psychological empowerment) fit the data sufficiently well, providing evidence that psychological empowerment can be represented by the four related, yet distinct, dimensions. Psychological empowerment was specified as a second-order model because the four core dimensions were believed to reflect and additively contribute to the same underlying construct. This operationalization of psychological empowerment has been since commonly used in the literature (e.g., Avolio et al., 2004; Gagne et al., 1997; Koberg et al., 1999; Kraimer et al., 1999; Laschinger et al., 2004; Liden et al., 2000; Seibert et al., 2004; Spreitzer et al., 1997; 1999).

The second extension is that she demonstrated the nomological validity of Thomas and Velthouse's (1990) definition of psychological empowerment. Figure 3 summarizes the nomological relationships that she examined in the two studies (Spreitzer, 1995; 1996).

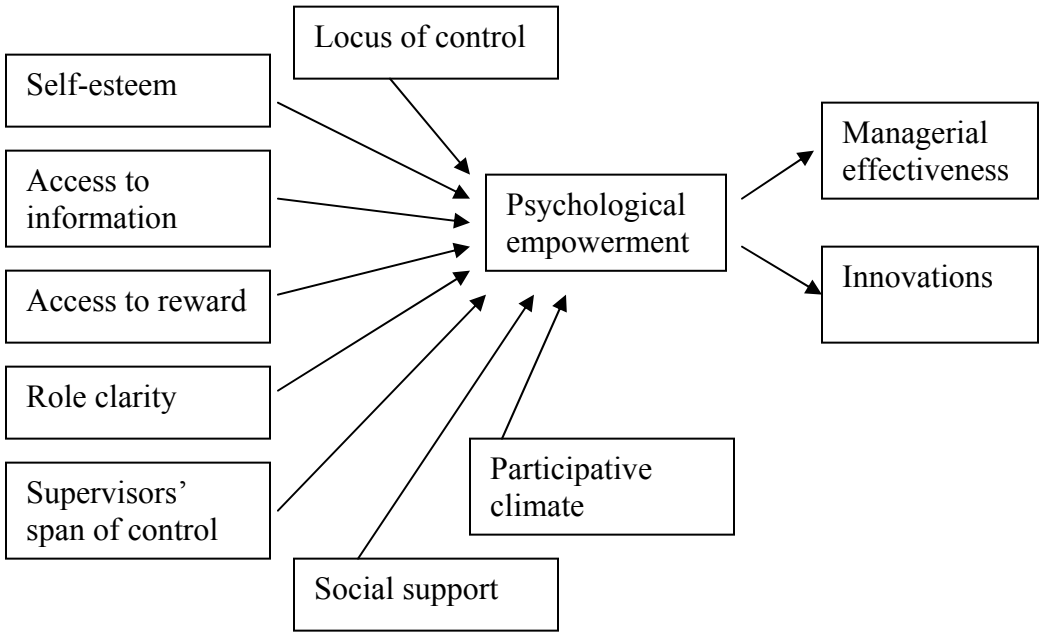

FIGURE 3: Spreitzer's (1995; 1996) Studies of Psychological Empowerment

Specifically, Spreitzer (1995) proposed that internal locus of control, self-esteem, access to information about organization (including mission and performance), and organizational rewards were positive predictors of psychological empowerment as defined by Thomas and Velthouse (1990). She found that self-esteem and access to information about the firm's mission and performance were significant predictors. In terms of consequences, she proposed that psychological empowerment was related to managerial effectiveness and innovation. She found support for these two relationships. Therefore, Spreitzer (1995) demonstrated that psychological empowerment, as defined by Thomas and Velthouse's (1990) perspective, predicted important work outcomes.

Spreitzer (1996) further examined the nomological network of psychological empowerment. She identified a number of social-structural antecedents that were believed to result in a greater level of psychological empowerment. Specifically, she hypothesized that role clarity, supervisors' wide span of control, social support from supervisors and coworkers, access to information and resources, and a participative unit climate would be associated with stronger psychological empowerment. In a managerial sample, she found that all these social-structural characteristics of organizations were significant predictors of psychological empowerment except for access to resources, suggesting that psychological empowerment is closely related to workplace environment, social climate, and organizational policies and practices.

Summary. Overall, this section contains the following main points.

- Spreitzer (1995) provides an operationalization of Thomas and Velthouse's (1990) definition of psychological empowerment.

- Her studies indicate that psychological empowerment has nomological validity, evidenced in its relationships with a range of important work variables such as access to information and managerial effectiveness.

CHAPTER III

CONCEPTUAL FLAWS IN THOMAS AND VELTHOUSE'S DEFINITION

One of the positive features of programmatic research on a conceptual area is that it often generates more new questions than it answers. This is certainly the case with the Thomas and Velthouse's (1990) perspective on empowerment. Specifically, while their perspective of psychological empowerment has been the most frequently used within the organizational sciences (e.g., Avolio et al., 2004; Koberg et al., 1999; Kraimer et al., 1999; Laschinger et al., 2004; Liden et al., 2000; Seibert et al., 2004), a number of studies are repeatedly highlighting possible shortcomings in various aspects underlying the Thomas and Velthouse's (1990) approach.

This Chapter provides an overview of these potential shortcomings. These shortcomings are discussed in three areas below: (a) conceptual ambiguities and problems with the linkage to intrinsic task motivation—there are three specific issues associated with this linkage, (b) questionable dimensionality of psychological empowerment—inaccurate and incomplete dimensionality, and (c) interpretational difficulty of the nomological network. Table 3 summarizes these shortcomings.

Shortcomings of Thomas and Velthouse's Definition

Conceptual Ambiguities and Problems with the Linkage to Intrinsic Task Motivation

Thomas and Velthouse (1990) emphasize that psychological empowerment is a motivational construct. That is, those who are psychologically empowered through the four core dimensions are those who are intrinsically motivated to work on job tasks.

TABLE 3: Conceptual Flaws in Thomas and Velthouse's Definition

Conceptual Flaws
(a) Conceptual ambiguities and problems with the linkage to intrinsic task motivation • Intrinsic task motivation is an *outcome*, rather than a part of the essence of psychological empowerment • Limited conceptual distinction between intrinsic task motivation and the construct of job motivation as traditionally examined in the literature • The four dimensions are said to collectively represent intrinsic task motivation, but indeed may be representing some other constructs (b) Questionable dimensionality of psychological empowerment • Possible inaccuracy of dimensionality • Possible incompleteness of dimensionality (c) Interpretational difficulty of nomological network, which stems from the fact that the four dimensions are often related to the same outcomes quite differently

There are three specific conceptual flaws associated with this linkage to intrinsic task motivation: (i) intrinsic task motivation may be an outcome instead of a part of the essence of psychological empowerment, (ii) there is only limited distinction between intrinsic task motivation and the construct of job motivation that has been extensively examined in the organizational sciences, and (iii) the four core dimensions may collectively represent some constructs other than intrinsic task motivation. Addressing these flaws is important because intrinsic task motivation is a fundamental element in Thomas and Velthouse's (1990) conceptualization of psychological empowerment.

Essence or outcome? Specifically, it appears that intrinsic task motivation is an *outcome*, rather than a part of the essence of psychological empowerment as suggested by Thomas and

Velthouse (1990). There is theoretical and empirical support for this argument. In terms of theoretical support, Deci and Ryan's (1991) self-determination theory suggests that feelings of competence and self-determination (two of the four core dimensions of psychological empowerment) must be satisfied before individuals are intrinsically motivated. That is, motivational researchers see intrinsic task motivation as an outcome of self-determination and competence, contrary to Thomas and Velthouse's (1990) perspective.

In terms of empirical support, Gagne et al. (1997) found that dimensions of psychological empowerment are antecedents of employees' intrinsic task motivation. More specifically, instead of using the second-order factor approach adopted by Spreitzer (1995) to model the four dimensions, the authors treated the four dimensions as antecedents of intrinsic task motivation. They found that the four dimensions significantly predicted intrinsic task motivation, leading to the conclusion that "the dimensions of empowerment differentially *affect* [italics added] workers' intrinsic task motivation" (Gagne et al., 1997; p. 1237). This again is not fully consistent with Thomas and Velthouse's (1990) assertion that the four dimensions collectively represent one's intrinsic task motivation.

Indeed, even Thomas and Velthouse (1990) state themselves that the four dimensions are "proximal *cause* [italics added] of intrinsic task motivation and satisfaction" (p. 668). That is, they believe that intrinsic task motivation may be a proximal outcome of the four core dimensions rather than being equivalent to the collective of the four dimensions.

Thus, there are reasons to believe that intrinsic task motivation may not be indicating the core essence of psychological empowerment as suggested by Thomas and Velthouse (1990) and Spreitzer (1995; 1996). Instead, intrinsic task motivation may be viewed an outcome of psychological empowerment (Gagne et al., 1997).

Intrinsic task motivation or job motivation? The second flaw associated with the linkage of psychological empowerment to intrinsic task motivation is that there is only limited conceptual distinction between intrinsic task motivation and the construct of job motivation as traditionally examined in the literature (e.g., Kanfer, 1987; Locke & Latham, 2004). Thomas and Velthouse (1990) assert that intrinsic task motivation is essentially the same as job motivation examined by other researchers but at the level of analysis of individual tasks or projects. In other words, job motivation is a broader construct in that it relates to job motivation in general whereas intrinsic task motivation is specifically related to job tasks or projects. As such, theoretically speaking, the two constructs are almost equivalent; they only differ in the levels of analysis.

This theoretical similarity with the construct of job motivation poses a challenge to the field of psychological empowerment. Specifically, job motivation is often interpreted as the direction, amplitude, and persistence of an individual's behavior dedicated to his or her job (Campbell & Pritchard, 1976). During the past few decades, numerous journal reviews (e.g., Ambrose & Kulik, 1999; Campbell & Pritchard, 1976; Kanfer, 1990; Locke & Latham, 2004) and books (e.g., Atkinson, 1964; Hackman & Oldham, 1980; Pinder, 1998; Porter, Bigley, & Steers, 2003) have been already written on the topic of job motivation.

Because psychological empowerment and job motivation have only limited theoretical distinction, it raises concerns about the unique theoretical contribution of Thomas and Velthouse's (1990) definition of psychological empowerment (Menon, 2001), especially when job motivation has already been extensively examined. It is also unclear whether it implies that all the theories and findings in the literature on job motivation be applicable to the construct of psychological empowerment, and vice versa.

Is it really intrinsic task motivation? The third related flaw associated with the linkage of psychological empowerment to intrinsic task motivation is that the four dimensions are said to collectively represent intrinsic task motivation, but indeed may be representing some other constructs. This flaw is particularly obvious in the Spreitzer's (1995) measurement instrument in which intrinsic task motivation is not any part of the measurement content (Table 4 provides the measurement items). Instead, it is only *theorized* as a second-order factor governing the four core dimensions. As such, the second-order overarching factor may be argued as representing some other theoretical constructs. For instance, Spreitzer (1995; 1996) suggests herself that the four dimensions "reflect an active, rather than a passive, orientation to a work role" (Spreitzer, 1996, p. 484). Thus, it can be argued that the second-order factor is indicating an active role orientation. It can even be argued that the second-order factor observed in Spreitzer's (1995) study is reflecting common method variance (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). That is, because respondents in Spreitzer's (1995) study self-reported their evaluations of these 12 items, the second-order factor may have captured the common variance created by the self-reported method.

Summary. Overall, this section contains the following main points.

- Thomas and Velthouse suggest that psychological empowerment is equivalent to intrinsic task motivation, an assertion that is conceptually flawed.
- First, there are theoretical reasons and empirical support to believe that intrinsic task motivation may be an outcome of psychological empowerment.
- Second, there appears to be the problem of conceptual redundancy because psychological empowerment is not theoretically distinct from the construct of job motivation that has been extensively examined.

TABLE 4: Spreitzer's (1995) Measurement Scale of Psychological Empowerment

Dimension	Measurement items
Meaningfulness	The work I do is very important to me. My job activities are personally meaningful to me. The work I do is meaningful to me.
Competence	I am confident about my ability to do my job. I am self-assured about my capabilities to perform my work activities. I have mastered the skills necessary for my job.
Choice	I have significant autonomy in determining how I do my job. I can decide on my own how to go about doing my work. I have considerable opportunity for independence and freedom in how I do my job.
Impact	My impact on what happens in my department is large. I have a great deal of control over what happens in my department. I have significant influence over what happens in my department.

- Third, it may even be argued that the factor underlying the four dimensions is not necessarily intrinsic task motivation, but other factors such as an active role orientation (cf. Spreitzer, 1995; 1996)

Questionable Dimensionality of Psychological Empowerment

The second major conceptual flaw with Thomas and Velthouse's (1990) definition relates to the dimensionality of psychological empowerment. There are two specific flaws here: (i) possible inaccuracy, and (ii) possible incompleteness. Pointing out these flaws associated with the dimensionality of psychological empowerment is important because it may suggest that the core essence of psychological empowerment is not yet captured in Thomas and Velthouse's (1990) multidimensional conceptualization of empowerment or it has apparently included too

many "noise" dimensions, resulting in some researchers' hesitation to use their conceptualization (e.g., Boudrias, Gaudreau, & Laschinger, 2004; Corsun & Enz, 1999).

Possible inaccuracy of dimensionality. With regard to the possible inaccuracy of dimensionality, there are theoretical reasons and empirical evidence to believe that some of the dimensions are antecedents or outcomes rather than the core essence of psychological empowerment. Therefore, psychological empowerment may in fact be comprised of fewer than four dimensions. For instance, some researchers believe that competence is an antecedent of empowerment (Liden & Arad, 1996) because when people feel competent, they should be more intrinsically motivated to work on job tasks than when they believe that they cannot excel. Specifically, Liden and Arad (1996) comment that "acknowledging that self-efficacy [competence] is needed *before* [italics in the original text] an individual is capable of assuming greater responsibility for carrying out tasks and making decisions, self-efficacy may be more accurately viewed as a prerequisite to power acquisition than a component of empowerment" (p. 214).

Others, on the other hand, propose that competence is an outcome of empowerment (e.g., Cheung et al., 2005; Ozer & Bandura, 1990) because those who are empowered feel more resourceful and, therefore, believe that they can perform well on the task. For instance, Ozer and Bandura (1990) found that female subjects who participated in an empowerment program in which they learned physical skills to defend themselves against unarmed sexual assailants reported a marked increase in their self-efficacy to defend themselves. Cheung et al. (2005) found that those subjects who had joined a self-help group designed to empower them intra- and inter-personally reported a greater sense of mastery in life. Thus, competence may also be argued as an outcome of empowerment.

Further, meaningfulness and impact can be argued as antecedents or outcomes instead of a part of the essence of psychological empowerment. Hackman and Oldham's (1980) job characteristics model indicates that meaningfulness and impact may be antecedents of job motivation. More specifically, they suggest that critical psychological states mediate the effects of job characteristics on favorable work outcomes such as motivation. Two of the three critical psychological states are experienced meaningfulness of work and experienced responsibility for outcomes of the work (impact). This implies that individuals must feel their work as meaningful and important before they are intrinsically motivated. Renn and Vandenberg (1995) found empirical support for this assertion.

Conversely, Liden and Tewksbury (1995) comment that the meaningfulness and impact dimensions "more frequently appear as outcomes of empowerment" (p. 387). That is, those who feel empowered at work may consequently see their work as meaningful and themselves as impactful. Liden and Arad (1996) also suggest that only when individuals successfully acquire power and eventually exercise them can they make an increased impact on others or organizations, indicating their belief that impact should be an outcome of psychological empowerment.

Overall, except for the dimension of choice, whether the rest of the three dimensions (meaningfulness, competence, and impact) are the true essence of psychological empowerment as proposed by Thomas and Velthouse (1990) or actually predictors or outcomes of psychological empowerment (Cheung et al., 2005; Liden & Arad, 1996; Liden & Tewksbury, 1995; Ozer & Bandura, 1990) is still debatable.

Possible incompleteness of dimensionality. The second specific conceptual flaw indicating questionable dimensionality is the possible incompleteness of dimensionality. In

particular, there appears to be other core dimensions to describe the psychological experiences of empowerment that Thomas and Velthouse's (1990) definition has not covered (e.g., Corsun & Enz, 1999; Menon, 2001; Peterson & Speer, 2000). Therefore, Thomas and Velthouse's (1990) research may represent only one of the various views of the dimensionality of psychological empowerment. Table 5 outlines these various dimensions proposed in other definitions of psychological empowerment.

TABLE 5: Dimensionality of Psychological Empowerment

Studies	Dimensions of psychological empowerment
Thomas & Velthouse, 1990	Meaningfulness, competence, choice, impact
Corsun & Enz, 1999	Meaningfulness, influence, self-efficacy
Peterson & Speer, 2000	Political efficacy, perceived competence, internal locus of control, desire for control
Zimmerman, 2000	Beliefs about competence, efforts to exert control, and an understanding of the socio-political environment.
Menon, 2001	Perceived control, perceived competence, goal internalization

For instance, Zimmerman (2000) suggests that psychological empowerment involves three dimensions: one's competence, efforts to exert control, and a critical awareness of the surrounding environment. Therefore, his perspective of psychological empowerment has a strong focus on one's potential to take behavioral actions and exert control on the external environment. That is, those who are psychologically empowered are those who have strong beliefs about their competence, motivated to take control, and have a strong understanding of the

context in which behavioral control is performed. Two of the dimensions (competence, efforts to exert control) are consistent with the dimensions of competence and choice proposed by Thomas and Velthouse (1990).

Peterson and Speer (2000) use political efficacy, perceived competence, internal locus of control, and desire for control to represent psychological empowerment. Political efficacy represents individuals' interest and confidence in participating in governance matters. Perceived competence is individuals' confidence in their ability to lead and direct others. Internal locus of control is individuals' beliefs whether they are the masters of their own fate. Finally, desire for control is a motivational index measuring how much individuals want to have control in general. These four dimensions appear to revolve around the notion of maintaining active control, similar to Thomas and Velthouse's (1990) perspective that choice is one of the important dimensions of psychological empowerment.

Alternately, Menon (2001) uses the following three dimensions: perceived control, perceived competence, and goal internalization. Perceived control is similar to Thomas and Velthouse's (1990) choice dimension. Perceived competence is essentially Thomas and Velthouse's (1990) competence dimension. Goal internalization is the extent to which individuals take organizational goals as their own work goals. These dimensions collectively suggest that empowered individuals, according to the author, have control over their work, confidence in their work competence, and identify with organizational goals.

In sum, while Thomas and Velthouse's (1990) multidimensional conceptualization of psychological empowerment has provided an important advancement in the literature, some other researchers opt for other multidimensional models. Based on the current state of the literature, it is difficult to argue which multidimensional conceptualization is superior. However,

the primary point here is that perhaps Thomas and Velthouse's (1990) perspective of the dimensionality of psychological empowerment may not necessarily represent the most accurate or complete one. Further, their perspective is not entirely agreed by some researchers.

Summary. Overall, this section contains the following main points.

- Thomas and Velthouse's (1990) definition of psychological empowerment has questionable dimensionality.
- First, except for the choice dimensions, the other three dimensions may be argued as antecedents or outcomes rather than a part of the essence of psychological empowerment.
- Second, their dimensionality may not necessarily be complete. Other researchers have proposed different dimensions of psychological empowerment.

Interpretational Difficulty of the Nomological Network

The third major drawback of Thomas and Velthouse's (1990) definition is the interpretational difficulty of its nomological network, which stems from the fact that the four dimensions are often related to the same outcomes quite differently (e.g., Carless, 2004; Kraimer et al., 1999; Liden et al., 2000; Spreitzer et al., 1997). This raises doubts about whether the four dimensions should be treated as a collective to indicate psychological empowerment. Specifically, when the four dimensions are related to the same variables differently, it is difficult to interpret findings about psychological empowerment as researchers cannot be sure whether it is psychological empowerment or one dominant dimension relating to a particular variable. The occurrence of the latter case can be problematic because it may mean that in some circumstances, researchers need to base explanation and prediction on one dominant dimension (e.g., competence), but on another dimension (e.g., impact) in another circumstance.

Various studies demonstrate that the four dimensions of psychological empowerment are not related to the same outcomes in the same fashion. Kraimer et al. (1999) proposed and found support that the task feature of job autonomy should be related to the dimension of choice; task feedback should be related to both competence and impact; and task meaningfulness should be related to perception of meaningfulness. They also proposed and found support that the dimensions of meaningfulness and competence were related to occupation turnover intention whereas the dimensions of choice and impact should be related to organizational commitment.

Liden et al. (2000) found that leader-member exchange predicted the dimensions of choice and impact, but not meaningfulness and competence. They also found that meaningfulness positively predicted work satisfaction, but competence negatively predicted it. The other two dimensions were not related to work satisfaction. Further, they found that the dimensions of meaningfulness and impact significantly predicted organizational commitment but competence and choice did not. Finally, they found that the dimensions of impact and competence significantly predicted job performance, but meaningfulness and choice did not.

Spreitzer et al. (1997) also made the same observation that different dimensions of psychological empowerment were related to the same outcomes differently. For work effectiveness, they found that competence and impact were significant positive predictors whereas meaningfulness and choice were not. On the contrary, with respect to job satisfaction, they found that the dimensions of meaningfulness and choice were significant positive predictors whereas competence and impact were not. Finally, with respect to job stress, they found that meaningfulness was a positive predictor, competence was a negative predictor, and the other two dimensions, choice and impact, were not related to job stress.

Carless (2004) examined the role of psychological empowerment as a mediator in the relationship between psychological climate and job satisfaction. Psychological climate is employees' perceptions and interpretations of organizational environments. The author found that while psychological empowerment was a significant mediator, the dimensions of meaningfulness and competence were largely responsible for this mediating effect. The other two dimensions, choice and impact, were not.

Overall, when the four dimensions of psychological empowerment are related to the same outcomes differently, it becomes a challenge to interpret the nomological networks of the construct of psychological empowerment because it is difficult to pinpoint whether all the four dimensions contribute about equally to an observed relationship or one of the dimensions is driving the relationship. This makes theorizing the role of psychological empowerment in organizational theories difficult.

Summary. Overall, this section contains the following main points.

- The third major flaw of the definition of psychological empowerment proposed by Thomas and Velthouse (1990) is the interpretational difficulty of the nomological network of psychological empowerment.
- When the four dimensions are related to the same outcomes differently, it is difficult to interpret which dimension is that main driver in a particular nomological relationship.

Motivation for Re-Conceptualization

As discussed, Thomas and Velthouse's (1990) definition of psychological empowerment has three major conceptual flaws. They are (a) conceptual ambiguities and problems with the linkage to intrinsic task motivation, (b) questionable dimensionality of psychological

empowerment, and (c) interpretational difficulty of the nomological network. Overall, there appears to be a need to have a refined definition that retains the positive features of Thomas and Velthouse's (1990) definition, and yet does not have the outlined conceptual flaws.

In terms of the positive features of Thomas and Velthouse's (1990) definition, their work directs researchers to pay attention to two critical components of empowerment. First, they proposed a psychological perspective of empowerment. This perspective is an important advancement because it is logical to believe that empowerment policies and practices may not have full effects if employees do not feel that they are empowered. Second, their assertion that psychological empowerment is partly represented by employees' sense of choice is agreed by other researchers (e.g., Carless, 2004; Liden & Arad, 1996; Mills & Ungson, 2003). Therefore, a refined definition of psychological empowerment should at least include these two elements: (a) an emphasis on psychological processes, and (b) an emphasis on a sense of choice.

This study proposes that an emphasis on psychological processes may be expressed through highlighting the fact that empowerment experiences often involve one's state of awareness (Vogt & Murrell, 1990), a psychological state of devoting more attention to a focal object. An emphasis on a sense of choice may be expressed through describing empowered employees as active agents of organizations who accept a choice-making role because this sense of choice, once enhanced, may predispose employees to more actively take the authority and responsibility of making choices and decisions at work.

Therefore, the current re-conceptualization of psychological empowerment centers on the following three aspects: employees' state of awareness, active orientation at work, and sense of choice-making. It should be emphasized here, though, that the focus on these three components in the current study does not imply that the new definition of psychological empowerment has

three content dimensions. In fact, the first two components form the theoretical foundation upon which the new definition is built, whereas the third component is the major content domain of psychological empowerment. Specifically, a state of awareness represents the psychological state characterizing empowered employees. An active orientation at work characterizes those who have more power. It is the more general manifestation of empowerment experiences. A sense of choice-making is the core and immediate indicator of this active orientation. It, therefore, represents the core content domain of psychological empowerment. These elements of psychological empowerment are not the focus in Thomas and Velthouse's (1990) research. These three components are discussed in greater detail in the next Chapter. Further, a comparison between the new definition and Thomas and Velthouse's (1990) are provided in that Chapter, too.

CHAPTER IV

RE-CONCEPTUALIZATION OF PSYCHOLOGICAL EMPOWERMENT AND HYPOTHESES

In this Chapter, a new definition of psychological empowerment is introduced. This definition has three major theoretical components (this does not imply that the new definition has three content dimensions. In fact, the first two components form the theoretical foundation whereas the third one is the core content dimension). Specifically, it involves a state of awareness, the psychological state characterizing empowered employees. Further, it involves an active orientation at work, which is the more general manifestation of empowerment experiences. Finally, a sense of choice-making is the major and immediate indicator of this active orientation and, thus, represents the core content domain of the new definition of psychological empowerment. Table 6 provides a summary of these three theoretical components underlying the new definition of psychological empowerment.

TABLE 6: Three Major Components Underlying the New Definition

Component	Description
State of awareness	The state characterizing those who are psychologically empowered.
Active orientation at work	Psychologically empowered individuals are likely to have an active orientation at work. Those who are not psychologically empowered may not have this active orientation at work.
Sense of choice-making (the core content domain)	The specific indicator of an active orientation at work. Psychologically empowered individuals accept the authority and responsibility to make decisions about their approach to work.

Following the discussion of how the new definition is derived, this new definition is compared with Thomas and Velthouse's (1990). Overall, the purpose of this Chapter is to provide the theoretical foundation upon which the new definition of psychological empowerment is built, therefore spelling out clearly what psychological empowerment entails.

Psychological Empowerment and State of Awareness

Researchers suggest that empowerment is not mainly concerned with what employees have done or have been doing, but with what they *can* do (Vogt & Murrell, 1990). That is, the goal of empowerment is to increase employees' power and, therefore, predispose them to approach future work situations in a different way such as being more autonomous than before (e.g., Carless, 2004). As such, it is reasonable to define psychological empowerment in a way that captures one's readiness to perform those behaviors supposedly resulting from empowerment policies and practices. The construct of awareness seems to fit here. Awareness is a state in which one dedicates increased attention to the focal object (Duval, Silvia, & Lalwani, 2001; Natsoulas, 1998), such as oneself or the external environment. A state of awareness often governs what one will subsequently believe and do (e.g., Carver & Scheier, 1981; Hull et al., 1986).

Researchers from different disciplines also emphasize explicitly or implicitly that the experience of being empowered often involves a cognitive state of awareness, though there is limited consensus on what the content of awareness is. For instance, Zimmerman (2000) suggests that an important component of empowerment experience is a state of "critical awareness" (p. 46) which represents a capacity to understand one's external environment. Ryles (1999) observes that "[h]istorically, the concept of empowerment arose from the self-help and political awareness movements of the late 1960s and early 1970s. Within those movements

emphasis was placed upon the raising of political consciousness both in the minds of activists and in the communities" (p. 601). The author, therefore, suggests that to understand empowerment, it is important to understand that "empowerment can be seen as a continuum that begins with an awareness of something tangible" (p. 602). Further, Curtis-Tweed (2003) suggests that an empowerment experience should be described as an awareness of options in the context. Shrestha (2003) theorizes that empowerment begins with an increase in personal consciousness. Similarly, Garba (1999) proposes that empowerment processes start with people's awareness of their standing in relation to the external environment. Falk-Rafael's (2001) qualitative study of employees' empowerment experiences indicates that employees reported that empowerment experiences involved increased awareness of their personal strengths and weaknesses and their choices at work. Overall, researchers agree that a state of awareness is a core part of individuals' empowerment experiences.

Because a state of awareness represents a core part of empowerment experiences, its activation may be closely related to the success of empowerment policies and practices. For example, Vogt and Murrell (1990) suggest that successful empowerment practices start with employees' self-awareness. More specifically, they suggest that for empowerment to work, employees "must know who they are, recognize their own changing characteristics, and be willing to evaluate their actions" (p. 92). Conversely, without a state of awareness, employee empowerment is unlikely to be effective. Fulton (1997) observed in her qualitative study of nurses' empowerment experiences that the medical profession hoped to empower nurses, yet it was unattainable as the nurses were not aware that they could play a more active role (e.g., voicing opinions) in the profession.

The observation that employees' awareness can potentially affect the success or failure of empowerment is not surprising given that awareness may govern the ways employees cognitively and behaviorally approach work. Numerous experimental studies have examined how a state of awareness may affect individuals in a variety of aspects. For example, researchers suggest that awareness is closely related to one's attention system (Duval et al., 2001; Hull & Levy, 1979; Turner, 1978). Turner (1978) found that those with heightened self-awareness gave more elaborate descriptions of themselves. Carver and Scheier (1978) found that self-awareness was associated with greater use of self-references in a sentence completion task. Further, a state of awareness also affects encoding and retrieval of information and attribution (Carver & Scheier, 1981). Specifically, when awareness is high, encoding of information often is performed in relation to that focal object (Rogers, 1977). Finally, a state of awareness may also govern one's goal motivation (Hull, Young, & Jouriles, 1986).

In summary, researchers agree that a state of awareness is an important element in describing the psychological experiences of empowerment, though there is limited consensus on the focal content when describing the state of awareness of empowered individuals (i.e., what are they aware of?). The current study suggests that this state of awareness is related to *how* people approach their work because possession of power is closely related to how individuals behave. The latter assertion is addressed in the next two sections. Overall, then, a definition of psychological empowerment should involve a psychological state of awareness of how one should approach work.

Summary. Overall, this section contains the following main points.

- Psychological empowerment often involves a state of awareness, which occurs when one dedicates increased attention to the focal object.

- Researchers from different disciplines emphasize that the experience of being empowered often involves a state of awareness, though there is limited consensus on what the content of awareness is (e.g., Ryles, 1999; Zimmerman, 2000).
- Researchers observe that the activation of a state of awareness of employees relates to success of empowerment (e.g., Fulton, 1997; Vogt & Murrell, 1990)
- A state of awareness is closely related to individuals' cognitive functioning and behavioral orientation.
- A definition of psychological empowerment should therefore highlight the aspect that it involves a psychological state of awareness.

Psychological Empowerment and Active Orientation at Work

In order to understand psychological empowerment, it is important to consult the research on power (Conger & Kanungo, 1988; Liden & Arad, 1996), especially in the social psychology, because psychological empowerment is essentially the psychological experiences of possession of more power. This section suggests that because the psychological possession of power (in a situation) often predisposes individuals to become more active (in that situation) (Keltner et al., 2003), psychological empowerment may be described as an elevated active orientation at work. Research on power in the social psychology provides a theoretical guide for the current study to draw this assertion.

Power is often defined as the control of valued resources (Galinsky, Gruenfeld, & Magee, 2003). Power is often context-specific. That is, a person may have power in one context because s/he has control over valued resources but becomes powerless in another context where his or her valued resources are controlled by others. Traditionally, power is examined from a sociological or structural perspective (e.g., French & Raven, 1959). For instance, researchers

examine the distribution of power between managers and employees and the subsequent tension between the two groups (e.g., Mills & Ungson, 2003).

However, psychologists are increasingly interested in examining how power affects an individual's cognitive or psychological functioning (e.g., Aguinis, Nesler, Quigley, & Tedeschi, 1994; Fiske & Depret, 1996; Galinsky et al., 2003; Keltner & Robinson, 1996; 1997). For instance, Galinsky et al. (2003) suggest that power can be conceived as "a cognitive structure that can be activated by an appropriate environmental stimulus" (p. 453). They also suggest that activating the concept of power activates those behavioral tendencies associated with power. Further, Anderson and Berdahl (2002) found that the effect of possession of power on behaviors was mediated by a sense of power, highlighting the importance of examining power from a psychological perspective.

A psychological perspective of possession of power is informed by the behavioral approach/inhibition theory of power (Keltner et al., 2003). This theory suggests that the psychological possession or deprivation of power tips the balance between these two cognitive-behavioral systems: the approach and inhibition systems. When power is increased, the approach system, similar to a reward-detecting system, is activated. When it is activated, individuals demonstrate approach-related cognitions and behaviors (Keltner et al., 2003) such as "affective states that motivate approach-related behaviors, cognitive assessments of reward contingencies in the environment, and forward locomotion" (p. 268). On the contrary, when power is reduced, the inhibition system, similar to an alarm system, is activated. When this system is activated, individuals demonstrate inhibition-related cognitions and behaviors (Keltner et al., 2003) such as "affective states such as anxiety, heightened vigilance and inspection of punishment contingencies, and avoidance and response inhibition" (p. 268). Overall, this theory

suggests that the psychological experiences of possession of power may be closely related to one's approach and inhibition orientation.

The behavioral approach/inhibition theory of power receives robust support in various experimental studies. Galinsky et al. (2003) found that those subjects asked to play a supervisor role had a generally greater proclivity to act (i.e., taking a card in a game of blackjack) than those subjects asked to play a subordinate role. Also, those subjects who were given greater power also demonstrated a wider range of interpersonal behaviors (Guinote, Judd, & Brauer, 2002), greater extraversion (Anderson, John, Keltner, & Kring, 2001), increased expression of their attitudes and opinions (Anderson & Berdahl, 2002), and more expressive body language such as smiles (Keltner, Young, Heerey, Oemig, & Monarch, 1998) than subjects with less power.

The behavioral approach/inhibition theory of power and the experimental evidence supporting it lead to the belief that the experiences of being empowered at work should be best described as an increased sense of active orientation at work. As Keltner et al. (2003) suggest, "powerful individuals should show elevated activity" (p. 269). Thus, psychological empowerment should be defined to capture this active orientation at work. That is, those who are psychologically empowered often view themselves as active agents of organizations in undertaking their day-to-day work roles. This active orientation at work of empowered individuals is also highlighted by Spreitzer (1995; 1996).

It is important to note that an active orientation can be manifested in a number of ways (cf. Galinsky et al., 2003; Guinote et al., 2002; Keltner et al., 1998; 2003). At work, it can be manifested in, for example, increasing work engagement, actively giving suggestions, helping coworkers, or other cognitions and behaviors. Therefore, there is a need to more succinctly underscore how this elevated activity is manifested in the workplace in order to more precisely

describe the psychological experiences of empowerment. Spreitzer (1995;1996) does not discuss how this active orientation would be specifically manifested. This is addressed in the next section.

Summary. Overall, this section contains the following main points.

- To understand psychological empowerment, it may be important to consult research on power in the social psychology because psychological empowerment is essentially the psychological experiences of possession of more power.
- The psychological experience of possession of power is informed by the behavioral approach/inhibition theory of power (Keltner et al., 2003), which suggests that power is closely related to one's approach orientation. This theory receives strong experimental support (Galinsky et al., 2003).
- Therefore, psychological empowerment should be defined in a way to capture a state of awareness whereby employees view themselves as active agents of organizations in undertaking their day-to-day work roles.
- However, there is a need to more specifically highlight how the active orientation of psychologically empowered individuals is manifested in the workplace.

Psychological Empowerment and Sense of Choice-Making

This section more specifically discusses how an active orientation resulting from psychological empowerment may be psychologically or behaviorally manifested at work. It is proposed that an active orientation of empowered individuals may be manifested in a belief that they are the ones directing themselves to navigate through their work environment (cf. Galinsky et al., 2003). In other words, they assume for themselves a choice-making role; they accept the authority and responsibility to make decisions about their approach to work. This aspect of the

current definition is consistent with Thomas and Velthouse's (1990) assertion that one dimension of psychological empowerment is a sense of choice. However, it goes beyond their work by discussing the underlying theoretical reasons for linking psychological empowerment to choice-making.

More specifically, there are theoretical reasons and experimental evidence supporting the assertion that those who are empowered may be more willing to accept the authority and responsibility to make decisions at work. According to Keltner et al. (2003), when a person has power, s/he has greater access to different kinds of material rewards such as financial incentives and social rewards such as approval from others. As such, the person may see a wider range of choices in the external environment compared to those without power. Moreover, when a person has power, s/he realizes that there will be less interference from others in obtaining the rewards s/he desires (Keltner et al., 2003). As such, options that are not seen as attainable previously may be seen as attainable when a person believes s/he has power. Therefore, the perceived set of choices is expanded.

Besides an enhanced perception of availability of choices, another theoretical reason why psychological empowerment may be manifested in people's acceptance of a choice-making role at work is because those who have power are often more self-sufficient. For instance, Galinsky et al. (2003) suggest that since those who possess power depend less on the resources of others, they are more easily able to satisfy their own needs and desires compared to others. Further, Kipnis (1972) found that those with power had increased psychological distance from others and enhanced self-perceptions. This self-sufficiency in those who have power is likely to be translated into their preferences for making decisions of their own and directing their own ways through the work environment.

In terms of experimental evidence, Galinsky et al. (2003) found that those subjects who were primed to believe they had power were more likely to turn off an annoying fan in the room (regardless of a lack of clear permissibility to do so) than those who were primed to believe they were powerless. This suggests that those perceiving that they have greater power are more likely to take control of their lives and make decisions that they think are the best than are those who perceive they are powerless. Conversely, Anderson and Berdahl (2002) found that those subjects possessing a low sense of power inhibited themselves from expressing their true attitudes, kept their disagreement to themselves, and expressed agreement even when they disagreed. Projecting this finding to an organizational context, it is reasonable to expect that those employees who are not empowered are likely to see themselves as having limited control over how they approach work (Mills & Ungson, 2003) and are reluctant to change this status quo. That is, they are unlikely to see choice-making as a possibility in the organization.

Researchers from different disciplines also explicitly or implicitly suggest that empowerment involves people taking a choice-making role. For instance, Carless (2004) defines empowerment as "giving employees the autonomy to make decisions about how they go about their daily activities" (p. 405). Cooney (2004) suggests that empowerment involves "self-management" (p. 677), implying that empowered individuals have to make more personal decisions than those who are not empowered. Zimmerman (2000) suggests that "an empowered person might be expected to exhibit a sense of personal control" (p. 47). As such, the psychological experience of empowerment may involve seeing oneself taking charge and making decisions at work. Further, Mills and Ungson (2003) suggest that empowerment is "the decentralization of the decision-making authority and responsibility to lower-level employees" (p. 143). The logical outcome of this empowerment process is a feeling that one can make choices

and has "the discretion to act on one's own" (Mills & Ungson, 2003, p. 144). Fulton (1997), interviewing a group of employees about experiences of empowerment, concluded that empowerment was best conceptualized as the freedom to make decisions with authority. Brown (2001) precisely states that the true feeling of empowerment occurs only when one has the discretion and authority to make decisions. Forrester (2000, p. 67) suggests that empowerment implies "the freedom and the ability to make decisions and commitments". Finally, Ford and Fottler (1995) suggest that empowerment "came from having the authority to do something about problems they faced while doing that job" (p. 21).

Overall, researchers from different disciplines agree that employee empowerment is best described as involving employees to make decisions and choices at work. Therefore, at the most fundamental level, psychological empowerment should be defined to reflect this choice-making role of empowered individuals. It should be noted that this role of choice-making involves simultaneously accepting the authority and responsibility of choice-making. As suggested by Randolph (2000), employees often "fail to grasp that empowerment means sharing *risks and responsibilities* [italics added] as the price for freedom to act" (p. 95). Only when individuals are aware that they have both the authority and responsibility of making decisions related to their jobs are they psychologically empowered.

The above discussion of empowerment and choice-making at work leads to the new definition of psychological empowerment. It is a psychological force anchoring individuals' expectations regarding the performance of their areas of responsibilities. The force is experienced as *a psychological state in which individuals are aware that they have the freedom to take the responsibility for and to have influence over the ideas, decisions, actions, and standards of quality in undertaking their areas of job duties.* That is, those who are

psychologically empowered are those who are aware that they can take an active role at work—being the choice-making agents of their work—including determining the ideas, decisions, actions, and standards of quality related to their daily job tasks. These expectations, once formed after empowerment, are rather stable and govern how the empowered individuals approach their work. Those who are not empowered, on the other hand, do not have this psychological force that anchors their expectations regarding how they behave at work.

Summary. Overall, this section contains the following main points.

- An active orientation at work is likely to be manifested as individuals' sense of choice-making. They accept the authority and responsibility to make decisions and choices about their approach to work.
- This assertion is based on the theoretical reasons that possession of power increases the perceived set of choices and enhances a sense of self-sufficiency (cf. Keltner et al., 2003).
- This assertion also receives experimental support. Experimental studies demonstrate that possession of power increases subjects' tendency of actively making choices and decisions (e.g., Galinsky et al., 2003).
- Researchers from different disciplines also agree that employee empowerment is best described as involving employees to make decisions and choices at work (e.g., Carless, 2004; Cooney, 2004).
- The new definition of psychological empowerment is a psychological state in which individuals are aware that they have the freedom to take the responsibility for and to have influence over the ideas, decisions, actions, and standards of quality in undertaking their areas of job duties.

Comparison with Thomas and Velthouse's Definition

The new definition bears some similarity with Thomas and Velthouse's (1990) and Spreitzer's (1995; 1996) view of psychological empowerment. However, there are also several important extensions. Table 7 summarizes these similarities and differences.

TABLE 7: Comparing the New and Old Definition of Psychological Empowerment

Similarities	Description
A psychological perspective	Both definitions are grounded in a psychological perspective. Thomas and Velthouse's definition focuses on four cognitions. The new definition highlights the component of awareness.
Emphasizing a sense of choice	One of the dimensions of Thomas and Velthouse's definition is choice. The new definition suggests that sense of choice-making is the core specific content domain of psychological empowerment.
Differences	**Description**
A state of awareness	The new definition suggests that psychological empowerment involves a state of awareness. Because psychological empowerment is mainly concerned with what one can be, not has been, describing psychological empowerment as a state of awareness would capture the readiness. Thomas and Velthouse's definition has ignored this aspect.
Emphasis on an active orientation	Spreitzer (1995; 1996) suggests that psychological empowerment as defined by Thomas and Velthouse represents an active role orientation. However, she does not provide the underlying theoretical reasons. The new definition highlights this aspect based on the behavioral approach/inhibition theory of power.
Emphasis on taking both authority and responsibility	The new definition does not only highlight a sense of choice-making, but the willingness to accept the responsibility associated with it. Thomas and Velthouse's definition does not highlight this aspect.

Similarities

In terms of similarity, both definitions are rooted in a psychological perspective of empowerment. That is, they emphasize that for empowerment to work, employees must *feel* psychologically empowered, however psychological empowerment is defined. Second, both definitions have emphasized the importance of *choice* in describing the psychological experiences of empowerment. Thomas and Velthouse (1990) assert that those who are empowered see their work behaviors as self-determined. Consistent with their view, the new definition suggests that those who are empowered are those who are aware that they can be active at work, manifested in a propensity to make choices and take responsibility at work. Thus, both the new and Thomas and Velthouse's (1990) definitions emphasize that empowered individuals' approach to work is self-initiating and active. As commented by Liden and Arad (1996), "we view Thomas and Velthouse's choice dimension as being central to power potential" (p. 210). Therefore, it is important to note again that Thomas and Velthouse's (1990) work has established a foundation for the new definition to build upon.

Differences

However, the new definition extends Thomas and Velthouse's (1990) and Spreitzer's (1995) work in several important ways. First, it emphasizes that psychological empowerment involves a state of awareness. Several researchers have also suggested so (e.g., Curtis-Tweed, 2003; Falk-Rafael, 2001; Garba, 1999; Shrestha, 2003). As mentioned earlier, psychological empowerment is mainly concerned with what one can be, not has been (Vogt & Murrell, 1990). Therefore, it is important that the definition captures this readiness. Expressing psychological empowerment in terms of a state of awareness captures this future orientation (Garba, 1999). On the other hand, Thomas and Velthouse's (1990) definition does not clearly state whether choice

is an evaluative statement of what one has been or what one potentially can be. However, their emphasis on interpretation of task features appears to indicate their belief that psychological empowerment captures what one has been.

The second extension is related to Spreitzer's (1995; 1996) assertion that the four dimensions of psychological empowerment collectively represent an active work role orientation. The theoretical foundation underlying this assertion is lacking in her studies. That is, she does not discuss in detail why psychological empowerment is closely related to one's increased active role orientation. Contrarily, the current study formally asserts that an active orientation at work is a part of psychological empowerment based on the behavioral approach/inhibition theory of power (Keltner et al., 2003) and the experimental evidence supporting it. Therefore, the current study provides a theoretical extension over Thomas and Velthouse's (1990) and Spreitzer's (1995; 1996) work as to whether and why individuals would be more active when psychologically empowered.

Another important extension is the emphasis on both authority and responsibility of making decisions. Other empowerment researchers also suggest that having a sense of responsibility is an important part of empowerment experiences (e.g., Randolph, 2000). Unfortunately, this component is not fully captured in Thomas and Velthouse's (1990) conceptualization, nor was it captured in Spreitzer's (1995) measurement scale. The new definition, on the other hand, emphasizes that when a person is psychologically empowered, s/he becomes an agent of the organization who accepts the responsibility associated with the authority to make decisions. Simply having the authority to make decisions but without taking the responsibility qualifies more as delegation (Randolph, 2000).

Earlier, three major flaws associated with Thomas and Velthouse's (1990) definition of psychological empowerment are noted. They are (a) conceptual ambiguities and problems with the linkage to intrinsic task motivation, (b) questionable dimensionality of psychological empowerment, and (c) interpretational difficulty of the nomological network. It is important to address here whether the new definition may have similar conceptual flaws.

Conceptual ambiguities and problems with the linkage to intrinsic task motivation. The first conceptual flaw highlighted earlier was the conceptual ambiguities and problems associated with the linkage to intrinsic task motivation. The new definition does not appear to have this problem since it does not encompass intrinsic task motivation as a component. However, it is entirely reasonable to expect that those who are psychologically empowered (i.e., those who are aware that they can make choices at work) are motivated to dedicate efforts to work. When a person has more control over his/her job, s/he should have stronger effort-outcome expectancy, therefore increasing intrinsic task motivation (Spector, 1982).

Questionable dimensionality of psychological empowerment. The second problem highlighted previously was that some of the dimensions proposed by Thomas and Velthouse (1990) can be argued as antecedents or outcomes of psychological empowerment (Cheung et al., 2005; Liden & Arad, 1996; Liden & Tewksbury, 1995; Ozer & Bandura, 1990). As noticed, choice is the only dimension in their definition that was not criticized in this regard (Liden & Arad, 1996). As such, it corroborates the current assertion that psychological empowerment perhaps is best captured via this dimension of choice, or other dimensions that closely reflect this characteristic. Therefore, it does not appear that the new definition confounds antecedents and outcomes with the true essence of psychological empowerment.

It is also highlighted earlier that Thomas and Velthouse's (1990) definition of psychological empowerment may be incomplete, evident in the emergence of other proposed dimensions or definitions. While the new definition contains only one major content dimension (i.e., a sense of choice-making), a number of researchers from various disciplines have described the core experience of empowerment as one that is convergent with this content dimension (Brown, 2001; Carless, 2004; Cooney, 2004; Ford & Fottler, 1995; Forrester, 2000; Fulton, 1997; Gutierrez, 1990; Mills & Ungson, 2003; Zimmerman, 2000). Besides, several streams of research in the social psychology (e.g., possession of power, self-awareness) have provided a theoretical guide to establish the new definition. With this theoretical foundation, the new definition should be less susceptible to disagreement.

Interpretational difficulty of the nomological network. The third conceptual flaw highlighted earlier was that the four dimensions of psychological empowerment proposed by Thomas and Velthouse (1990) may have different nomological networks, causing difficulty with interpreting the nomological network of psychological empowerment. This flaw questions the validity of treating the four dimensions as a collective. Since the new definition parsimoniously focuses on the core content dimension (choice-making at work), the same conceptual flaw should not exist. As such, the interpretation of any observed relationship between the new definition of psychological empowerment and other criteria should be less ambiguous compared to Thomas and Velthouse's (1990) definition.

Summary. Overall, this section contains the following main points.

- There are some similarities and differences between the new definition and Thomas and Velthouse's (1990).

- In terms of similarities, both definitions emphasize a psychological perspective of empowerment and a sense of choice-making.
- In terms of differences, the new definition (a) emphasizes self-awareness as the core psychological state characterizing psychological empowerment, (b) provides theoretical foundation as to why empowered individuals are more likely to be active at work as proposed by Spreitzer (1995), and (c) highlights the importance of accepting both authority and responsibility as a true experience of psychological empowerment.
- The new definition is discussed in relation to the three conceptual flaws in Thomas and Velthouse's (1990) definition highlighted earlier. The new definition does not seem to have the same conceptual flaws.

Hypotheses

In proposing a new definition of psychological empowerment, this study is also to develop and test a measurement scale for the new definition and examine a theoretical model that includes some major antecedents and outcomes of psychological empowerment (as operationalized by the new measurement scale). These two purposes are achieved by testing the following hypotheses. Hypotheses 1 to 4 are concerned with the convergent, discriminant, and nomological validity of the new definition of psychological empowerment. Hypotheses 5 through 9 are associated with relationships in a proposed theoretical model (presented below).

The first hypothesis is that the new measurement scale should have convergent validity. That is, it should be related to other scales that measure constructs of a similar content as the new definition of psychological empowerment—a sense of choice making. In particular, the new measurement scale should be related to job autonomy (Hackman & Oldham, 1980). Job

autonomy indicates the extent to which one's job or work role provides one with sufficient autonomy, an important foundation for establishing a sense of choice making at work. Thus, the above reasoning leads to the prediction that:

Hypothesis 1: The new measurement scale is related to job autonomy.

The second hypothesis is that the new measurement scale should have discriminant validity. That is, it should not be strongly related to other scales that measure constructs of different content domains. Specifically, the following two scales are included: locus of control (Rotter, 1966) and need for autonomy (Steers & Braunstein, 1976). These two personality traits may predispose individuals to have an active orientation at work too. However, they should be distinct from the new measurement scale because they represent one's generalized tendencies whereas psychological empowerment is a reaction typically generated by stimuli in the work context (e.g., empowerment policies) (Conger & Kanungo, 1988). Further, because the proposed definition of psychological empowerment is theory-grounded, its measurement scale should be distinct from social desirability. That is, those who score high on the new measurement instrument should be those who are psychologically empowered, not those who answer the survey in a socially desirable way. Overall, the prediction is that:

Hypothesis 2: The new measurement scale is distinct from (a) locus of control, (b) need for autonomy, and (c) social desirability.

The third hypothesis is that the new measurement scale should have nomological validity. Bagozzi (1981) suggests that nomological validity is achieved when a construct is empirically related to at least one antecedent or outcome of interest. In terms of which variables to be examined here, this study follows Spreitzer's (1995) work which is the first to demonstrate the nomological validity of psychological empowerment defined in terms of Thomas and

Velthouse's (1990) perspective. Spreitzer (1995) suggests that the psychological experiences of empowerment should be related to internal locus of control, self-esteem, access to information, and rewards. Further, she suggests that psychological empowerment should be related to job and innovation performance. Locus of control is excluded in this hypothesis because it is already examined in the previous hypothesis. Innovation performance is also excluded because there are no strong theoretical reasons to believe that a sense of choice making will increase innovation performance. Therefore, the current hypothesis examines the following variables of interest: self-esteem, access to information, access to rewards, and job performance.

Those high in self-esteem should also have stronger psychological empowerment because one's sense of self-worth should reinforce one' confidence and willingness to take active control over one's work environment (Tharenou, 1979). Access to information, a key empowerment tool (Matthews et al., 2003), should also elicit psychological empowerment because information is needed to make better decisions and choices (Bowen & Lawler, 1992). Access to rewards also promotes individuals to take on a more active role at work in order to attain the desired rewards (Spreitzer, 1995). Finally, psychologically empowered individuals should have better job performance than others because they are more psychologically resourceful and energized, and self-directed in improving their work (Seibert et al., 2004). Overall, the prediction is that:

Hypothesis 3: The new measurement scale is positively related to (a) self-esteem, (b) access to information, (c) access to rewards, and (d) job performance.

As mentioned earlier, the new definition of psychological empowerment retains the positive features of Thomas and Velthouse's (1990) definition of psychological empowerment and extends the theoretical richness of the construct with the behavioral approach/inhibition theory of power. As such, the new measurement scale of psychological empowerment is

expected to have a stronger predictive power than Spreitzer's scale, which as outlined in earlier Chapters, has some shortcomings. Therefore, the current study predicts that:

Hypothesis 4: The new measurement scale is more strongly related to (a) self-esteem, (b) access to information, (c) access to rewards, and (d) job performance than is Spreitzer's (1995) scale.

While Spreitzer's (1995) theoretical model is acceptable, the model can be re-specified to reflect more accurate conceptualizations of the nature, antecedents, and consequences of psychological empowerment. This model is depicted in the Figure 4.

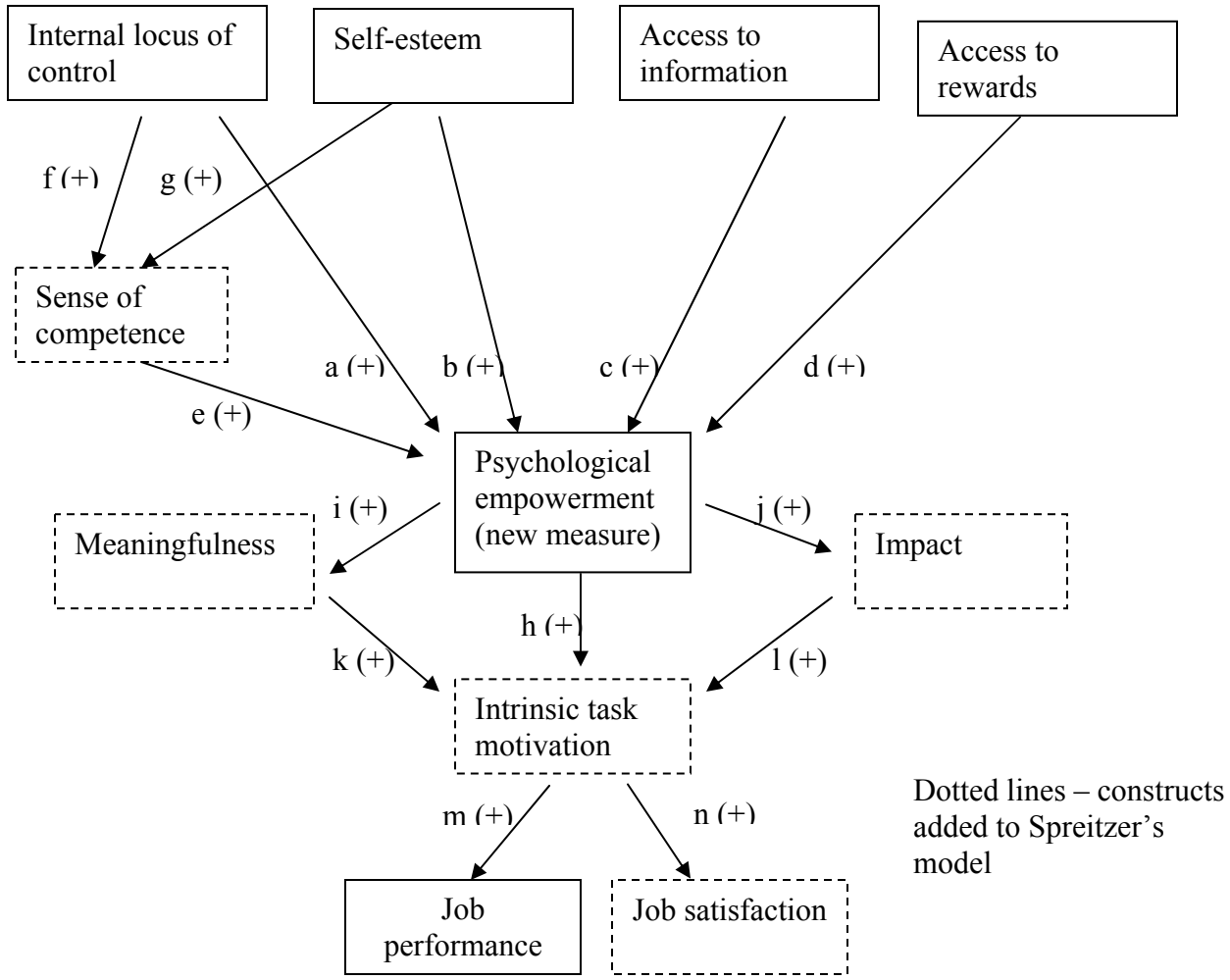

FIGURE 4: The Proposed Theoretical Model

With respect to the antecedents of psychological empowerment, Spreitzer's (1995) model becomes the major theoretical guide. Specifically, similar to Spreitzer (1995), locus of control, self-esteem, access to information, and access to rewards are included in the model as antecedents of psychological empowerment. While Hypothesis 2 suggests that locus of control and psychological empowerment are not the same constructs from a psychometric perspective, there are conceptual grounds, though, for treating locus of control as an antecedent to psychological empowerment. Because internals tend to believe that they can maintain control over their work (Spector, 1982), they are likely to possess the expectations that they frequently make choices and decisions at work, and therefore have a stronger feeling of psychological empowerment (path a). As discussed in Hypothesis 3, self-esteem, access to information, and access to rewards should also be associated with stronger psychological empowerment (paths b, c, and d, respectively). Finally, in the earlier Chapter, it is reasoned that sense of competence should not be a part of the core essence of psychological empowerment as Thomas and Velthouse (1990) proposed. Instead, it should precede feelings of empowerment (Liden & Arad, 1996). To reflect this conceptualization, competence is specified as another antecedent of psychological empowerment (path e).

In fact, there are theoretical reasons to believe that the effects of two of the aforementioned antecedents--locus of control and self-esteem--on psychological empowerment are at least partially mediated by sense of competence. Specifically, the belief that one directs the work environment (i.e., an internal locus) should increase one's confidence or competence to excel at job tasks (Spector, 1982) (path f). High self-esteem, or sense of overall competence, should be manifested in different life domains including at work. Therefore, a high level of self-esteem should logically generate a high level of task competence (Mruk, 1995) (path g).

Multiple outcomes of psychological empowerment are specified in the model. In the earlier Chapter, it is reasoned that intrinsic task motivation and two of the four core dimensions (meaningfulness and impact) of Thomas and Velthouse's (1990) definition of psychological empowerment should not be viewed as a part of the core essence of psychological empowerment. Instead, they should be outcomes of empowerment. In light of these contentions, intrinsic task motivation is specified as an outcome of psychological empowerment (Gagne et al., 1997) (path h). Moreover, as mentioned earlier, Liden and colleagues (Liden & Arad, 1996; Liden & Tewksbury, 1995) assert that meaningfulness and impact should be outcomes of psychological empowerment. Therefore, these two relationships are also included in the theoretical model (paths i and j). Further, according to Hackman and Oldham (1980), the critical psychological states of meaningfulness of work and experienced responsibility for outcomes of the work (impact) should increase intrinsic motivation. Therefore, paths k and l are specified in the model. Finally, based on past research, intrinsic task motivation is specified to be positively related to job performance (Fried & Ferris, 1987) (path m) and job satisfaction (Oldham, Hackman, & Stepina, 1978) (path n). That is, those who are willing to dedicate efforts to jobs should logically perform better and feel more joyful at work than those who are reluctant to dedicate efforts. Even though Spreitzer (1995) did not examine job satisfaction, this variable is included because it is one of the most frequently examined outcomes of interest in this stream of research (e.g., Carless, 2004; Eylon & Bamberger, 2000; Laschinger et al., 2004; Liden et al., 2000; Seibert et al., 2004)

Overall, this model suggests that personal characteristics (e.g., personality traits) and work environment factors (e.g., empowerment policies) may increase individuals' sense of psychological empowerment or choice-making. A sense of competence at least partially

mediates some of these relationships. In turn, psychological empowerment should be related to important outcomes including perceptions of meaningfulness, impact, and intrinsic task motivation. Finally, intrinsic task motivation should predict job performance and satisfaction. These relationships are summarized as the following hypotheses:

Hypothesis 5: Locus of control (H5a), self-esteem (H5b), access to information (H5c), access to rewards (H5d), and sense of competence (H5e) are positively related to psychological empowerment.

Hypothesis 6: Sense of competence partially mediates the effects of locus of control (H6a) and self-esteem (H6b) on psychological empowerment.

Hypothesis 7: Psychological empowerment is positively related to meaningfulness (H7a), impact (H7b), and intrinsic task motivation (H7c).

Hypothesis 8: Intrinsic task motivation partially mediates the effects of psychological empowerment (H8a), meaningfulness (H8b), and impact (H8c) on job performance.

Hypothesis 9: Intrinsic task motivation partially mediates the effects of psychological empowerment (H9a), meaningfulness (H9b), and impact (H9c) on job satisfaction.

Summary of All Hypotheses

This Chapter has introduced the new definition of psychological empowerment, which is grounded in research on cognitive awareness and the behavioral approach/inhibition theory of power (Keltner et al., 2003). It suggests that when psychologically empowered, employees become aware that they can take a more active role at work, manifested in a stronger tendency to accept the authority and responsibility to make decisions at work. Further, this definition retains the positive features of Thomas and Velthouse's (1990) work. While this definition is theoretically sound, there is a need to compare the operationalization of this definition with

Spreitzer's (1995) operationalization of Thomas and Velthouse's (1990) work in order to provide a more informed comparison. The next Chapter provides a detailed discussion of the empirical studies performed to test the validity of the measurement scale for the new definition of psychological empowerment, including an empirical comparison with Spreitzer's (1995) scale. Table 8 provides a summary of the hypotheses proposed.

TABLE 8: Summary of Hypotheses

Hypothesis 1:	The new measurement scale is related to job autonomy.
Hypothesis 2:	The new measurement scale is distinct from (a) locus of control, (b) need for autonomy, and (c) social desirability.
Hypothesis 3:	The new measurement scale is positively related to (a) self-esteem, (b) access to information, (c) access to rewards, and (d) job performance.
Hypothesis 4:	The new measurement scale is more strongly related to (a) self-esteem, (b) access to information, (c) access to rewards, and (d) job performance than is Spreitzer's (1995) scale.
Hypothesis 5:	Locus of control (H5a), self-esteem (H5b), access to information (H5c), access to rewards (H5d), and sense of competence (H5e) are positively related to psychological empowerment.
Hypothesis 6:	Sense of competence partially mediates the effects of locus of control (H6a) and self-esteem (H6b) on psychological empowerment.
Hypothesis 7:	Psychological empowerment is positively related to meaningfulness (H7a), impact (H7b), and intrinsic task motivation (H7c).
Hypothesis 8:	Intrinsic task motivation partially mediates the effects of psychological empowerment (H8a), meaningfulness (H8b), and impact (H8c) on job performance.
Hypothesis 9:	Intrinsic task motivation partially mediates the effects of psychological empowerment (H9a), meaningfulness (H9b), and impact (H9c) on job satisfaction.

CHAPTER V

METHODS

This Chapter outlines (a) the characteristics of samples surveyed and the procedures to survey them, (b) the measurement scales adopted to measure the constructs of interest, and (c) statistical analysis strategies. Specifically, two organizations were surveyed, one in the restaurant industry and another in the interior design industry. Most of the measurement scales used in the survey were taken directly from the literature. These scales from the literature have demonstrated acceptable psychometric properties. The proposed definition of psychological empowerment was measured by newly generated items. With regard to the statistical analysis strategies, correlational analyses, factor analyses, and structural equation modeling were used.

Samples and Procedures

Two organizations participated in this study. They operated in different industries. Organization A was a restaurant chain operating in the Southeastern U. S. with about 1,000 employees across 30 branches. Organization B was an interior design company operating in eight locations in the Southeastern U. S. and employing about 500 employees in total. More than one organization was surveyed to address the generalizability of the empowerment construct. Surveying multiple organizations also has the added benefit of increasing sample size and, therefore, the power of the statistical analyses.

The human resource director of the two organizations distributed an invitation to participate to all employees in the branches. In this invitation letter, study objectives were outlined and confidentiality of data was promised. Specifically, employees were informed that

completed responses would be returned directly to the University of Georgia and that results would be reported in the aggregate. One hundred and eighty-six responses were returned from Organization A, representing a response rate of about 19%. Three hundred and forty responses were returned from Organization B, representing a response rate of about 68%. Overall, a total of 526 surveys were returned, representing an overall response rate of 35%. A review of this dataset indicated that there were no systematic patterns of missing values. That is, missing data appeared to occur randomly. After deleting missing data listwise (Schafer & Graham, 2002), the final sample was 514. The demographics of this final sample are provided in Table 9. The two samples were similar on most demographic characteristics. They did not differ in education level, average job level, racial composition, average job tenure, and average organization tenure. However, Organization A (the restaurant chain) had a lower average age and a greater percentage of women than Organization B (the interior design company).

Measurement Scales

The constructs measured in the survey included the new scale of psychological empowerment, Spreitzer's four scales of psychological empowerment, and the work environment characteristics of job autonomy, access to information, and access to rewards. It also included measures of personality traits of self-esteem, locus of control, need for autonomy, and social desirability, intrinsic task motivation, job satisfaction, and job performance.

TABLE 9: Demographic Variables for the Final Sample

Variable	Statistics
Gender	
Male	405 (78.8%)
Female	109 (21.2%)
Race	
Caucasian	358 (69.6%)
African-American	39 (7.6%)
Hispanic	62 (12.0%)
Asian or Pacific Islander	33 (6.5%)
Native American	9 (1.8%)
Other	13 (2.5%)
Age	
20 years or younger	37 (7.2%)
21-30 years	169 (32.8%)
31-40 years	142 (27.6%)
41-50 years	113 (22.0%)
Older than 50 years	53 (10.4%)
Education	
Some high school	70 (13.6%)
High school diploma	134 (26.0%)
Some college/community college	154 (30.0%)
Associate/vocational degree	62 (12.1%)
Bachelor's degree	77 (15.0%)
Advanced degree (Master's, or Ph.D.)	17 (3.3%)
Organizational Tenure	
Less than 1 year	139 (27.0%)
1 – 2 years	130 (25.3%)
3 – 5 years	85 (16.5%)
6 – 10 years	112 (21.8%)
More than 10 years	48 (9.4%)
Job Tenure	
Less than 1 year	173 (33.7%)
1 – 2 years	172 (33.5%)
3 – 5 years	75 (14.6%)
6 – 10 years	52 (10.1%)
More than 10 years	42 (8.0%)
Job Level	
Employee	404 (78.6%)
Manager	82 (15.9%)
Senior manager	28 (5.5%)

The new scale of psychological empowerment. A new scale was developed to operationalize the new definition of psychological empowerment, which is a psychological state in which individuals are aware that they have the freedom to take responsibility for and have influence over the ideas, decisions, actions, and standards of quality in their areas of job duties. A multiple-step approach was adopted: (a) item generation, (b) content adequacy assessment, and (c) item refinement. In the first step, 17 items were written based on the new definition of psychological empowerment. This is congruent with Hinkin's (1995) deductive approach where a theoretical definition of a construct is established before item generation. Further, in order to generate items that were easily understood by managers and employees, an informal discussion about empowerment was arranged with four managers who identified themselves as possessing a great deal of empowerment at work and four employees who identified themselves as lacking empowerment at work. The discussion revolved around the new theoretical definition of psychological empowerment and how it may be manifested at work. The 17 items are given in Table 10.

In the second step, doctoral students and professors in the discipline of organizational behavior and applied psychology were recruited to evaluate the content adequacy of the new items. Specifically, 15 doctoral students and professors evaluated these items and judged whether these items properly measured the new definition of psychological empowerment provided on the survey. The content validity ratio (Hambleton, 1980) was at least .8 for all items on a possible range of -1 to +1, indicating that all items were largely judged to be an appropriate operationalization of the new definition of psychological empowerment. The raters were also asked to give comments on items they considered in need of minor rewording or revision. At this stage, confidence in the content adequacy of items was quite high.

Table 10: Seventeen Items of Psychological Empowerment

Items
1. When I encounter a minor work problem, I feel comfortable solving it myself.
2. If I see a better way to do something, I don't hesitate to do it that way.
3. I expect to set my own pace to accomplish my tasks.
4. I think the best way to accomplish my job is to simply follow the procedures (R).
5. When I arrive at work on a given day, I expect the goals that I need to fulfill are outlined for me (R).
6. When discussing a new idea with my supervisor, I don't hesitate to point out any potential problems with the ideas.
7. I expect to simply listen to my supervisor during meetings and not say much at all (R).
8. I evaluate my work against my own standards of quality.
9. It is not my place at work to question the standards that we are expected to meet (R).
10. When I am approached by management regarding some aspect of my job, I am viewed as the expert.
11. I am willing to risk small mistakes at work because I trust that there will be no serious consequences from them.
12. The standard of quality I set for my work is the one that matters the most to me.
13. As far as I see it, my day-to-day work tasks are largely determined by management (R).
14. I make decisions about my work without fear of being punished for small mistakes.
15. I accept responsibility for the consequences of my decisions at work.
16. I prefer to consult with coworkers first before I do anything that differs from what is expected (R).
17. I expect to set challenging performance goals for myself.

Note. R = Reverse-coded

Spreitzer's psychological empowerment scale. Spreitzer's (1995) psychological empowerment scales were also administered in order to compare it with the new scale of psychological empowerment. Her 12-item scales measure the four core underlying dimensions of psychological empowerment proposed by Thomas and Velthouse (1990)—meaningfulness, competence, choice, and impact. Spreitzer (1995) reported internal consistency estimates of .84, .84, .80, and .85 for meaningfulness, competence, choice, and impact, respectively. Example items are "My job activities are personally meaningful to me." (meaningfulness) "I have mastered the skills necessary for my job." (competence) "I have considerable opportunity for independence and freedom in how I do my job." (choice) and "I have significance influence over

what happens in my department" (impact). The Cronbach's alpha for meaningfulness, competence, choice, and impact was .90, .86, .80, .72 respectively in the current study.

Job autonomy. Job autonomy was measured by the 3-item scale in the Job Diagnostic Survey (Hackman & Oldham, 1980). Fried and Ferris' (1987) meta-analysis indicates that, across cumulative studies, the scale has a mean internal consistency estimate of .69. Example items are "My job denies me any chance to use my personal initiative or judgment in carrying out the work" (reverse-coded) and "My job gives me considerable opportunity for independence and freedom in how I do the work." It should be noted that job autonomy is different from the choice dimension of Spreitzer's psychological empowerment scale (Kraimer et al., 1999). The focus of job autonomy is entirely on the job whereas the choice dimension focuses on the person. The Cronbach's alpha for this scale was .70 in the current study.

Access to information. Access to information was measured by Matthews et al.'s (2003) 5-item scale. These items ask the extent to which respondents agree that they have access to the information about different aspects of the organizations such as financial records, policies, procedures, files, and goals. Matthew et al. (2003) reported an internal consistency estimate of .81. Example items are "Employees are provided with financial records of the company" and "The company provides employees with information on company clients." The Cronbach's alpha was .80 in the current study.

Access to rewards. Access to rewards was measured using Vandenberg, Richardson, and Eastman's (1999) 7-item scale. These items ask the extent to which reward allocations in organizations depend on how well an individual performs. Vandenberg et al. (1999) reported an internal consistency estimate of .86. Example items are "If I perform my job well, I am likely to

be promoted" and "Generally, I feel this company rewards employees who make an extra effort." The Cronbach's alpha was .89 in the current study.

Self-esteem. Self-esteem was measured by Rosenberg's (1965) 10-item scale. Whiteside-Mansell and Corwyn (2003) found that this scale has an acceptable internal consistency of .83. Example items are "I feel that I have a number of good qualities" and "I take a positive attitude toward myself." The Cronbach's alpha was .92 in the current study.

Locus of control. Locus of control was measured by Presson, Clark, and Benassi's (1997) 6-item version of Levenson's (1974) locus of control scale. This scale measures the belief that one controls one's own fate. Presson et al. (1997) reported an internal consistency of .71. Example items are "My life is determined by my own actions" and "When I get what I want, it is usually because I worked hard for it." The Cronbach's alpha was .68 in the current study.

Need for autonomy. Need for autonomy was measured by Steers and Braunstein's (1976) 5-item scale. This scale measures the extent to which individuals demonstrate work behaviors originated from an intrinsic need for autonomy. Steers and Braunstein (1976) reported a test-retest reliability of .77. Example items are "I try my best to work alone on a job" and "I disregard rules and regulations that hamper my personal freedom." The Cronbach's alpha was .81 in the current study.

Social desirability. Social desirability was measured by Hay, Hayashi, and Stewart's (1989) 5-item shortened version of Marlowe-Crowne's (Crowne & Marlowe, 1960) 33-item social desirability scale. Hay et al. (1989) reported an internal consistency estimate of .75 for the shortened version. Example items are "I am always courteous even to people who are disagreeable" and "No matter who I'm talking to, I'm always a good listener." The Cronbach's alpha was .75 in the current study.

Intrinsic task motivation. Intrinsic task motivation was measured by Warr, Cook, and Wall's (1977) 6-item scale. This scale measures the extent to which a person is intrinsically motivated to dedicate efforts to job tasks. Warr et al. (1977) reported an internal consistency of .82. Example items are "I take pride in doing my job as well as I can" and "My opinion of myself goes down when I do this job badly." The Cronbach's alpha was .88 in the current study.

Job performance. Like Spreitzer (1995), respondents were asked to self-report their job performance. Job performance was measured by two items, which were "How would you rate your own performance?" and "How would your employer probably rate your work performance?" (Robinson, 1995). The five response options were "needs much improvement", "needs some improvement", "satisfactory", "good", and "excellent". Other sources of job performance ratings were not available from the two participating companies. Robinson (1995) reported a reliability estimate of .84. The Cronbach's alpha was .76 in the current study.

Job satisfaction. Job satisfaction was measured by a single-item, which was "I am satisfied with my job in general" (Dolbier, Webster, Mccalister, Mallon, & Steinhardt, 2005; Nagy, 2002; Wanous & Reichers, 1996). Dolbier et al. (2005) concluded in their empirical study that single-item measures of global job satisfaction demonstrate sufficient psychometric validity.

Common method factor. Like other researchers (Richardson & Vandenberg, 2005), five items were gathered from five conceptually unrelated scales. They are "I am exposed to high levels of noise at work" (Wilson, Dejoy, Vandenberg, Richardson, McGrath, 2004), "Some of the important achievements in life include acquiring material possessions" (Richins & Dawson, 1992), "I want an international career which would be a series of foreign assignments" (Tharenou, 2003), "I don't find anything wrong or reprehensible about workplace romance" (Jones, 1999), and "I have a poor appetite" (Ilfeld, 1978). The idea was that for five rather

unrelated items, the only underlying governing factor that might hold these five items together is common method variance. That is, these items were unlikely to load together on the same factor on theoretical grounds. The extent to which they did so was suggestive of common method variance. In that case, this factor could be used as a control variable in statistical analyses, alleviating the concern for bias stemming from self-reported data. This approach of detecting common method variance is consistent with Lindell and Whitney's (2001) suggested way of accounting for common method variance in cross-sectional research designs.

Statistical Analyses

All of the analyses in this study were conducted at the individual level. One-third of the final sample was randomly selected to examine the psychometric properties of the new psychological empowerment items, and to further reduce it. The remaining sample was used for the rest of the analyses and hypotheses testing (Hinkin, 1995).

Exploratory phase of the analysis. To examine the structure of the 17 new items of psychological empowerment, two types of factor analysis—unrestricted and restricted—were used. The goal of this analysis was twofold: (a) exploring the factor structure of the 17 new items of psychological empowerment. Recalling that the 17 items resulted collectively from discussions with managers and subsequently for an evaluation by subject matter experts, expectations regarding the underlying factor structure were not possible at this juncture. Given the historically complex nature of the conceptual domain of the psychological empowerment construct, a single-factor, however, was not expected, and (b) reducing the scale.

Specifically, the 17 items were first submitted to an unrestricted factor analysis. The extraction method was principle axis factoring, and the factor rotation method adopted was the Promax approach (Finch, 2006), which assumed that extracted factors were non-orthogonal. A

non-orthogonal rotation method was adopted because it was more realistic to expect that the extracted factors of psychological empowerment were related rather than independent. To make the scale more parsimonious, only those items with factor loadings of .3 or above in the factor solution were retained (Kachigan, 1982). The factor structure obtained was then tested using restricted factor analysis in which the pattern of factor loadings was specified according to the results of the unrestricted analysis. That is, items that loaded together within the unrestricted analysis were forced to (restricted) load together on only one factor. In this restricted factor analysis, the fit of the measurement model was examined.

In terms of evaluation of model fit, the following fit indexes were used: Chi-square value, Root Mean Square Error of Approximation (RMSEA; Steiger, 1990), NNFI (or TLI; Tucker & Lewis, 1973), and Comparative Fit Index (CFI; Bentler, 1990). Chi-square value was used as an overview of the fitness of the model. A large chi-square value indicated a poor fit. However, because the chi-square test is sensitive to sample size, other fit indices are needed to evaluate the fitness of models (Hu & Bentler, 1993). NNFI compares the fit of the model with the baseline null model. It is not systematically related to sample size, and it penalizes model complexity and misspecification (Marsh, Balla, & Hau, 1996). Hu and Bentler (1999) suggest that a value close to .95 is indicative of good fit. Another similar index that is recommended by researchers is CFI (Medsker, Williams, & Holahan, 1994). Again, a value close to .95 is indicative a good fit (Hu & Bentler, 1999). Finally, RMSEA indicates the magnitude of error residuals, therefore a lower value indicates better fit (less than .08; Hu & Bentler, 1999). Overall, a model with good fit is one in which NNFI $\geq$ .95, CFI $\geq$ .95, and RMSEA $\leq$ .08.

Confirmatory phase of the analysis. The rest of the constructs were measured using established scales. As such, items were expected to load on their respective underlying factors.

Therefore, no unrestricted factor analysis was conducted for these items. A confirmatory factor analysis (CFA) was performed to examine the factor structure of the measurement items using the testing sample (i.e., two-thirds of the final sample). Specifically, the measurement models of all constructs of interest including Spreitzer's (1995) psychological empowerment scale, job autonomy, access to information, access to rewards, personality traits of self-esteem, locus of control, need for autonomy, and social desirability, and outcomes of intrinsic job motivation and job performance were specified according to their theoretical factor structures in separate CFAs. These separate measurement models were expected to have acceptable fit given that all of these scales were established in the literature.

Common method variance. Before testing the hypotheses, it was beneficial to examine the potential effects of common method variance on the constructs measured because common method variance might affect the empirical results observed. Two sources of common method variance were examined: social desirability and self-reported method bias (Podsakoff et al., 2003). Social desirability represents a source of common method variance derived from individuals' tendency to present themselves in a favorable light, therefore affecting their propensity to endorse or disapprove the content of items (Crowne & Marlowe, 1960). On the other hand, self-reported method bias stems from asking multiple questions on the same survey that require self-reported answers (Podsakoff et al., 2003).

As discussed earlier, social desirability was measured by Hay et al.'s (1989) 5-item scale. It was expected that the measurement model of this construct should demonstrate acceptable fit because it reflected a stable individual difference. All constructs of interest in this study were alternatively specified in a structural equation model (SEM) in which social desirability was also specified as a source of influence on the items of the various measures. Factor loadings

representing the effects of social desirability on all of the scale items of other theoretical constructs significantly different from zero suggested that respondents' social desirability played a role in the current study. Conversely, factor loadings that were not significant suggested that respondents' social desirability was not a serious concern for the current study.

Self-reported method bias was represented by the five items described previously that were only remotely conceptually related to the constructs of interest in this study and to each other (Richardson & Vandenberg, 2005). Therefore, these items were unlikely to load together on the same factor on theoretical grounds. The extent to which they did so was suggestive of self-reported method bias. Factor loadings representing the effects of the self-reported method bias factor on all the scale items of other theoretical constructs significantly different from zero suggested that self-reported method bias played a role in the current study. Conversely, factor loadings that were not significant suggested that self-reported method bias was not a serious concern for the current study.

Hypotheses testing. The first stage in the analyses was to test the hypotheses using the remaining sample. Hypothesis 1, the convergent validity hypothesis, predicted that the new measurement scale was related to job autonomy. Hypothesis 2, the discriminant validity hypothesis, predicted that the new measurement scale was distinct from (a) locus of control, (b) need for autonomy, and (c) social desirability. These two hypotheses were tested in the same SEM. Specifically, the five constructs of interest here--psychological empowerment, job autonomy, locus of control, need for autonomy, and social desirability--were specified as a five-factor model in a SEM. If the constructs of psychological empowerment and job autonomy are substantially related (Hypothesis 1), then the SEM with the inter-correlation between these two

constructs freely estimated should have a better fit than the SEM with the inter-correlation fixed to zero, demonstrating convergent validity.

Next, if the constructs of psychological empowerment, locus of control, need for autonomy, and social desirability were theoretically distinct (Hypothesis 2), then when the relationship between psychological empowerment and each of these constructs was alternatively fixed to a value of one, there should be a significant worsening of model fit. Specifically, fixing a relationship between two constructs to a value of one essentially suggested that the two constructs were the same. If the two constructs were theoretically distinct, then this constraint was unwarranted and, therefore, should result in a worsening of model fit, demonstrating discriminant validity. Further, to compare the relationship between psychological empowerment and job autonomy with the relationship between psychological empowerment and locus of control, need for autonomy, and social desirability, tests of equality constraints were used. Finally, to compare the new scale of psychological empowerment with Spreitzer's (1995) scale, the analysis outlined above was repeated using Spreitzer's (1995) scale.

Hypothesis 3 related to the nomological validity of the new scale of psychological empowerment. Specifically, it was expected that the new scale of psychological empowerment was positively related to (a) self-esteem, (b) access to information, (c) access to rewards, and (d) job performance. The latter constructs were the variables of interest examined in Spreitzer's (1995) original validation study. Hypothesis 4 predicted that the new measurement scale was more strongly related to (a) self-esteem, (b) access to information, (c) access to rewards, and (d) job performance than was Spreitzer's (1995) scale. These two hypotheses were again tested in the same SEM.

Specifically, the four variables —self-esteem, access to information, access to rewards, and job performance—were specified as correlates of both the new and Spreitzer's psychological empowerment scales. For testing Hypothesis 3, the nomological validity hypothesis, the significance of the gamma coefficients for the relationships between the new scale of psychological empowerment and variables of interest was examined. SEM results indicating significant parameter estimates for these relationships would suggest that the new scale of psychological empowerment was related to these variables, demonstrating nomological validity. The explained variance in these four variables of interest was also examined.

To test hypothesis 4, the gamma coefficients for the relationships between Spreitzer's measure of psychological empowerment and the variables of interest were compared with the gamma coefficients for the relationships between the new measure of psychological empowerment and the same variables of interest. The comparison was made by placing equality constraints on the gamma coefficients. If the fit of the overall SEM with equality constraints significantly worsened compared to the model without the equality constraint, it would suggest that the equality constraint was unwarranted, and therefore, the gammas for the relationships between psychological empowerment and the variables of interest were not the same for the Spreitzer's operationalization and the new operationalization of psychological empowerment. If the SEM further indicated that the gamma coefficients for the group where the new scale of psychological empowerment was used were larger than the group where Spreitzer's scale was used, it would provide support for Hypothesis 4 that the new measure of psychological empowerment was more strongly related to self-esteem, access to information, access to rewards, or job performance than was Spreitzer's (1995) measure.

Hypotheses 5 to 9 were based on the proposed theoretical model. Hypothesis 5 was related to the antecedents of psychological empowerment. It predicted that locus of control (H5a), self-esteem (H5b), access to information (H5c), access to rewards (H5d), and sense of competence (H5e) were positively related to psychological empowerment. Hypothesis 6 was a mediational hypothesis. It predicted that sense of competence partially mediated the effects of locus of control (H6a) and self-esteem (H6b) on psychological empowerment. Hypothesis 7 was related to the outcomes of psychological empowerment. It predicted that psychological empowerment was positively related to meaningfulness (H7a), impact (H7b), and intrinsic task motivation (H7c). Finally, Hypotheses 8 and 9 were two other mediational hypotheses. They predicted that intrinsic task motivation partially mediated the effects of psychological empowerment, meaningfulness, and impact on job performance and satisfaction.

These hypotheses were tested using SEM (Shaver, 2005). In the first step, these relationships were specified in a structural model. Good model fit and significant paths in the expected directions would provide preliminary evidence that the relationships proposed in Hypotheses 5 through 8 were supported. The fit of the model would be again evaluated based on RMSEA, NNFI, and CFI. The second step was to look specifically at the tenability of the three mediational hypotheses. James, Mulaik, and Brett's (2006) approach of testing mediation in SEM was used. Specifically, with respect to the mediating role of sense of competence, an observation that the proposed predictors (locus of control and self-esteem) were significantly related to sense of competence, and sense of competence in turn was significantly related to psychological empowerment would lead to the conclusion that sense of competence mediated the effects of these two predictors on psychological empowerment (James et al., 2006). The same technique was applied to testing the mediating role of intrinsic job motivation. An observation

that psychological empowerment, meaningfulness, and impact were significantly related to intrinsic job motivation, and intrinsic job motivation in turn was significantly related to job performance or satisfaction would lead to the conclusion that intrinsic job motivation mediated the effects of these variables on job performance or satisfaction.

CHAPTER VI

RESULTS

In the first part of this Chapter, the new scale of psychological empowerment and measurement models for other constructs were discussed. Further, the influence of common method variance was examined before hypotheses testing. Moreover, to illustrate the contention that previous research may have confounded components of psychological empowerment, Spreitzer's (1995) model was re-examined. In the second part of this Chapter, results of testing Hypotheses 1 through 9 were discussed.

Exploratory Phase of the Analysis

One-third of the final sample (N = 171) was randomly selected as the development sample. At this stage, unrestricted factor analysis was mainly used. The sample size of 171 is sufficient for performing an unrestricted factor analysis with 17 items (Kachigan, 1982; Tinsley & Tinsley, 1987). The number of factors retained was largely based on the results of a parallel analysis and minimum average partial correlation procedures (explained below). The extraction method was principle axis factoring, and the factor rotation method adopted was the Promax approach (Finch, 2006), which assumed that extracted factors were non-orthogonal. Finally, factor loadings less than .3 were not interpreted in the factor solution (Kachigan, 1982).

The first step was to determine the optimal number of factors extracted from the data matrix. A parallel analysis (Horn, 1965), which compared the average eigenvalues constructed from random samples with those observed from the raw data, indicated that a two-factor solution was optimal. Researchers have found that parallel analysis performs very well in determining an

appropriate number of extracted factors (e.g., Reilly & Eaves, 2000; Velicer, Eaton, & Fava, 2000; Zwick & Velicer, 1986). Further, a second procedure of analyzing the minimum average partial correlation (Velicer, 1976) also supported that a two-factor solution resulted in the smallest magnitude of residuals after partialling out the effect of those two factors from the data matrix. Researchers suggest that this procedure "provides an unequivocal stopping point" (Zwick & Velicer, 1986, p. 440). Moreover, a Scree plot demonstrated that the curve began to flatten after the second factor. Overall, a two-factor solution appeared the most optimal for explaining the covariance among the empowerment items.

With evidence for a 2-factor structure underlying these 17 items, an unrestricted factor analysis was conducted that specified a two-factor solution. This approach gave all items opportunities to load on the two factors. On the other hand, retaining only the first two factors in a factor solution might not be the best approach here because the order of extracted factors may be determined by minute differences in eigenvalues. The results of this factor analysis are given in Table 11.

Both rotated factors had eigenvalues larger than one (2.68 and 1.64), and the total explained variance was 49%. As can be seen, the initial factor solution indicated that three of the 17 items (items 4, 5, and 16) had negative loadings larger than .30. Further, two items (items 6 and 11) had loadings less than .30 on both factors. Thus, these five items were eliminated during the next iteration. The remaining 12 items were then submitted to a more restricted factor analysis in which the pattern of factor loadings was now specified according to the results of the unrestricted factor analysis (items cross-loading on both factors were specified as indicators of the dimension that they had the stronger loading on). The fit of the model was, however, poor. The chi-square value was 134.87 ($p < .05$), RMSEA was .09, NNFI was .80, and CFI was .84.

TABLE 11: Unrestricted Factor Analysis Results

Item	Factor 1	Factor 2
1. When I encounter a minor work problem, I feel comfortable solving it myself.	.324	.447
2. If I see a better way to do something, I don't hesitate to do it that way.	.511	
3. I expect to set my own pace to accomplish my tasks.	.512	
4. I think the best way to accomplish my job is to simply follow the procedures (R).	.367	-.488
5. When I arrive at work on a given day, I expect the goals that I need to fulfill are outlined for me (R).	.359	-.300
6. When discussing a new idea with my supervisor, I don't hesitate to point out any potential problems with the ideas.		
7. I expect to simply listen to my supervisor during meetings and not say much at all (R).		.335
8. I evaluate my work against my own standards of quality.	.611	
9. It is not my place at work to question the standards that we are expected to meet (R).	.481	
10. When I am approached by management regarding some aspect of my job, I am viewed as the expert.	.447	
11. I am willing to risk small mistakes at work because I trust that there will be no serious consequences from them.		
12. The standard of quality I set for my work is the one that matters the most to me.		.518
13. As far as I see it, my day-to-day work tasks are largely determined by management (R).	.358	
14. I make decisions about my work without fear of being punished for small mistakes.		.561
15. I accept responsibility for the consequences of my decisions at work.		.645
16. I prefer to consult with coworkers first before I do anything that differs from what is expected (R).		-.503
17. I expect to set challenging performance goals for myself.		.474

Note. Factor loadings lower than .30 are not shown. R = Reverse-coded

An examination of the standardized residuals indicated that items 3 and 12 had large residuals (close to 3) (Bollen, 1989; Byrne, 1998). Therefore, these two items were eliminated (e.g., Motl, 2000). The remaining 10 items were again specified as a 2-factor model in a restricted factor analysis. While the fit of the model was improved, it was still not within the acceptable range. The chi-square value was 82.17 ($p < .05$), RMSEA was .09, NNFI was .81,

and CFI was .88. An examination of factor loadings, however, indicated that item 13 was not significantly different from zero. This item was, therefore, removed. Further, an examination of standardized residuals indicated that item 7 was often associated with standardized residuals larger than 3. Therefore, this item was also removed. The remaining 8 items were again tested in a restricted factor analysis. This two-factor model had fit indices that were acceptable. The chi-square value was 29.93 (*n.s.*), RMSEA was .06, NNFI was .95, and CFI was .97. No standardized residuals were close to a value of three. These eight items, when submitted to an unrestricted factor analysis, also emerged as two distinct factors with a pattern of factor loadings similar to those observed in the restricted factor analysis (The factor loadings in this unrestricted factor analysis are given in Table 12). The total explained variance was 61%. Therefore, these eight items were used as the new measure of psychological empowerment. They are given again in Table 13.

TABLE 12: Refined Unrestricted Factor Analysis Results

Item	Factor 1	Factor 2
1. When I encounter a minor work problem, I feel comfortable solving it myself.		.630
2. If I see a better way to do something, I don't hesitate to do it that way.	.492	
8. I evaluate my work against my own standards of quality.	.641	
9. It is not my place at work to question the standards that we are expected to meet (R).	.633	
10. When I am approached by management regarding some aspect of my job, I am viewed as the expert.	.619	
14. I make decisions about my work without fear of being punished for small mistakes.		.559
15. I accept responsibility for the consequences of my decisions at work.		.879
17. I expect to set challenging performance goals for myself.		.519

Note. Factor loadings lower than .30 are not shown. R = Reverse-coded

TABLE 13: Final Eight Items Measuring Psychological Empowerment

FACTOR 1
If I see a better way to do something, I don't hesitate to do it that way.
I evaluate my work against my own standards of quality.
It is not my place at work to question the standards that we are expected to meet (R).
When I am approached by management regarding some aspect of my job, I am viewed as the expert.
FACTOR 2
When I encounter a minor work problem, I feel comfortable solving it myself.
I make decisions about my work without fear of being punished for small mistakes.
I accept responsibility for the consequences of my decisions at work.
I expect to set challenging performance goals for myself.

Note. R = Reverse-coded

Items 2, 8, 9, and 10 loaded on the first factor. These items appeared to reflect employees' perceptions that they were knowledgeable about their jobs and, therefore, believed that they were experts (item 10). Because of this sense of expertise, they did not hesitate to look for better ways of approaching work (item 2) and they evaluated their work against their own expert standards (items 8 and 9). This dimension, therefore, was named Expertise, which corresponded to part of the definition of psychological empowerment used in the current study—a psychological state in which individuals are aware that they have the freedom to <u>have influence over</u> the ideas, decisions, actions, and standards of quality in undertaking their areas of job duties.

Items 1, 14, 15, and 17 loaded on the second factor. These items appeared to reflect employees' perceptions of taking on more responsibilities at work including accepting the consequences of their acts and decisions and setting performance goals for themselves. More fundamentally, they appeared to capture employees' sense of self-regulation including self-development through setting and changing goals (item 17) and learning and improving through

mistakes and consequences (items 1, 14, and 15). This dimension was, therefore, named as Self-Regulation, which also corresponded to the current definition of psychological empowerment—a psychological state in which individuals are aware that they have the freedom to take the responsibility for the ideas, decisions, actions, and standards of quality in undertaking their areas of job duties. The factor correlation was .37 between the two factors. The Cronbach's alphas for these two dimensions were .71 and .74, respectively. The composite reliability indices (Medsker et al., 1994) for these dimensions were .68 and .72, respectively.

The dimensions of Expertise and Self-Regulation were also compared in SEM with Spreitzer's (1995) four dimensions of psychological empowerment, meaningfulness, competence, choice, and impact. Specifically, these six dimensions of psychological empowerment were specified in a SEM. The chi-square value was 358.36 ($p < .05$), RMSEA was .06, NNFI was .94, and CFI was .95. Next, the relationship between Expertise and each of the four dimensions of Spreitzer's scale was alternatively fixed to a value of one. Fixing a relationship between two constructs to a value of one essentially suggests that the two constructs were the same. If the two constructs were theoretically distinct, then the constraint was unwarranted and, therefore, should result in a worsening of model fit. The same analysis was repeated for the dimension of Self-Regulation. The results of this analysis are given in the Table 14.

It was found that both the Expertise and Self-Regulation dimensions were distinct from the four dimensions in Spreitzer's scale. Each of the equality constraints was found to have resulted in a significant increase in chi-square value, suggesting that these equality constraints were not warranted. Therefore, Expertise and Self-Regulation appear empirically distinct from Spreitzer's (1995) four dimensions of meaningfulness, competence, choice, and impact. Their conceptual distinction is further addressed in the Discussion section (Chapter VII).

TABLE 14: Correlations among Dimensions of the New and Spreitzer's Scale

	Expertise	$\Delta\chi$ increase after adding the constraint of $\varphi = 1$
Meaningfulness	.32*	292.42*
Competence	.37*	283.27*
Choice	.34*	283.42*
Impact	.51*	126.67*
	Self-Regulation	$\Delta\chi$ after adding the constraint of $\varphi = 1$
Meaningfulness	.16*	286.27*
Competence	.23*	274.19*
Choice	.32*	218.43*
Impact	.64*	71.37*

Note. * $p < .05$

Confirmatory Phase of the Analysis

To examine the factor structure of the remaining measurement scales, CFA was performed separately on each theoretical construct using the testing sample (i.e., two-thirds of the final sample). This is also consistent with Anderson and Gerbing's (1988) suggestion that testing a structural model should be preceded by examining the measurement models of the constructs in the model first. In each CFA, the fit indices of the model were examined to see if the model had a good fit. Further, the error variances were examined to ensure that there were no Heywood cases (i.e., negative error variance) (Wothke, 1993). It was found that the measurement models for most of the constructs of interest including Spreitzer's four dimensions of psychological empowerment, self-esteem, access to information, access to rewards, and intrinsic task motivation yielded largely acceptable fit indices. Fit indices for the measurement models for the rest of the constructs—locus of control, need for autonomy, and social

desirability—were close to the acceptable ranges. These fit indices are given in Table 15. It should be noted that job autonomy, job performance, and job satisfaction are excluded from the Table because these scales have only three items or less, and therefore their measurement models were either just-identified or under-identified.

TABLE 15: Fit Indices for the Measurement Models for the Study Constructs

Constructs	X^2	RMSEA	NNFI	CFI
Spreitzer's scale	108.35*	.06	.96	.97
Self-esteem	224.36*	.11	.95	.96
Locus of control	46.33*	.09	.85	.91
Need for autonomy	7.24*	.08	.88	.92
Social desirability	17.07*	.09	.89	.94
Access to information	4.79	.00	1.00	1.00
Access to rewards	60.59*	.07	.94	96
Intrinsic task motivation	50.40*	.10	.96	.98

Note. * $p < .05$

Common Method Variance

Two sources of common method variance were examined here before proceeding to other empirical results: social desirability and self-reported method bias (Podsakoff et al., 2003). Social desirability represents a source of common method variance derived from individuals' tendency to present themselves in a favorable light, therefore affecting their propensity to endorse or disapprove the content of items (Crowne & Marlowe, 1960). On the other hand, self-

reported method bias stems from asking multiple questions on the same survey that require self-reported answers (Podsakoff et al., 2003).

Social desirability was measured by Hay et al.'s (1989) 5-item scale. The measurement model of this construct demonstrated close-to-acceptable fit. The Chi-square value was 17.07 ($p < .05$), RMSEA was .09, NNFI was .89, and CFI was .94. Next, all constructs of interest in this study were alternatively specified in a SEM in which social desirability was also specified as a source of influence on the measure's items. Factor loadings representing the effects of social desirability on the scale items of these theoretical constructs were examined. The results are given in Table 16. It was found that the effects of social desirability on these measurement scales were negligible. Specifically, it had significant effects on two (out of eight) items of the new scale of psychological empowerment, three (out of twelve) items of Spreitzer's scale of psychological empowerment, three (out of six) items of locus of control, three (out of ten) items of self-esteem, two (out of six) items of intrinsic task motivation, and no effects on items of job autonomy, need for autonomy, access to information, and access to rewards. Further, it was found that when social desirability was allowed to have effects on all of the scale items of each of the constructs examined, there was not a significant improvement of model fit as evident in a non-significant decrease in the chi-square value in each case, indicating a lack of an overall effect of social desirability on the constructs. Overall, then, there appeared no systematic effect of social desirability on the measurement items.

Self-reported method bias was represented by five items that were only remotely conceptually related to the constructs of interest in this study and to each other (Richardson & Vandenberg, 2005). Therefore, these items were unlikely to load together on the same factor on theoretical grounds. The extent to which they did so was suggestive of self-reported method

TABLE 16: The Effects of Social Desirability on Other Measurement Scales

Constructs	No. of scale items	No. of items significantly influenced by social desirability	Chi-square	RMSEA	NNFI	CFI
New measure of psychological empowerment	8	2	159.04	.08	.92	.94
Meaningfulness	3	0	84.43	.11	.93	.96
Competence	3	1	111.92	.13	.89	.93
Choice	3	1	94.38	.12	.89	.93
Impact	3	1	86.85	.12	.89	.93
Job autonomy	3	0	92.95	.12	.87	.92
Locus of control	6	3	165.59	.10	.85	.91
Self-esteem	10	3	418.83	.12	.92	.94
Need for autonomy	5	0	109.41	.08	.90	.92
Access to information	5	0	120.09	.10	.91	.94
Access to rewards	7	0	197.54	.09	.93	.95
Intrinsic task motivation	6	2	155.17	.10	.94	.96

bias. It was found that the measurement model for this method bias factor was very poor. The Chi-square value was 18.91 ($p < .05$), RMSEA was .09, NNFI was .14, and CFI was .57. This makes sense because these five items were not supposed to load together on a single factor on theoretical grounds. Next, factor loadings representing the effects of the self-reported method bias factor on the scale items of other theoretical constructs were examined. The results are given in Table 17. It was found that the effects of self-reported method bias on all of these measurement scales were again limited. Specifically, it had significant effects on one (out of eight) items of the new scale of psychological empowerment, one (out of twelve) items of Spreitzer's scale of psychological empowerment, one (out of ten) items of self-esteem, one (out

of five) items of need for autonomy, one (out of five) items of access to information, two (out of six) items of access to rewards, one (out of six) items of intrinsic task motivation, and no effects on items of job autonomy and locus of control. Further, it was found that when the self-reported method bias factor was allowed to have effects on all of the scale items of each of the constructs examined, there was not a significant improvement of model fit as evident in a non-significant change in the chi-square value in each case, indicating a lack of an overall effect of self-reported method bias on the constructs. Overall, there appeared no systematic effect of self-reported method bias on the measurement items.

TABLE 17: The Effect of Self-Reported Method Bias on Other Measurement Scales

Constructs	No. of scale items	No. of items significantly influenced by self-reported method bias	Chi-square	RMSEA	NNFI	CFI
New measure of psychological empowerment	8	1	216.71	.10	.84	.87
Meaningfulness	3	1	59.35	.08	.91	.93
Competence	3	0	101.06	.11	.80	.86
Choice	3	0	90.11	.10	.79	.84
Impact	3	0	73.40	.09	.76	.83
Job autonomy	3	0	56.25	.08	.79	.85
Locus of control	6	0	145.08	.10	.77	.83
Self-esteem	10	1	236.34	.14	.51	.61
Need for autonomy	5	1	94.90	.09	.88	.91
Access to information	5	1	76.10	.07	.92	.94
Access to rewards	7	2	114.45	.08	.94	.96
Intrinsic task motivation	6	1	128.86	.09	.92	.94

Spreitzer's (1995) Theoretical Model

Before presenting the results of hypotheses testing, Spreitzer's (1995) original model and an alternative model based on the literature were tested here. The goal of this analysis was to illustrate the point presented in the previous Chapters that that some of the components in Spreitzer's (1995) measure of psychological empowerment could be separated out and be treated as antecedents or outcomes (instead of a part of the core essence) of psychological empowerment (Liden & Arad, 1996; Liden & Tewksbury, 1995), highlighting the need to re-conceptualize the construct of psychological empowerment. Specifically, Spreitzer (1995) specified locus of control, self-esteem, access to information, and access to rewards as antecedents of her measure of psychological empowerment. Further, self-reported job performance was specified as an outcome of psychological empowerment. Testing with the current sample, it was found that the model fit was acceptable. The Chi-square value was 936.55 ($p < .05$), RMSEA was .07, NNFI was .92, and CFI was .92. Except for self-esteem, all antecedents in the model—locus of control, access to information, and access to rewards—were significantly related to Spreitzer's measure of psychological empowerment, which, in turn, was related to self-reported job performance. The parameter estimates are given in Figure 5.

Spreitzer's (1995) theoretical model, however, needs some modification based on the literature (Liden & Arad, 1996; Liden & Tewksbury, 1995). Acceptable fit indices associated with Spreitzer's (1995) model do not allow researchers to claim that the model is true or correct. It only means that they fail to reject the current model. Vandenberg (2006) emphasizes that there might be various models that have acceptable fit, and, therefore, researchers have to rely on theory to decide which model is the best. As pointed out in Chapter III, the theoretical literature indicates that the meaningfulness, competence, and impact dimensions should not be a

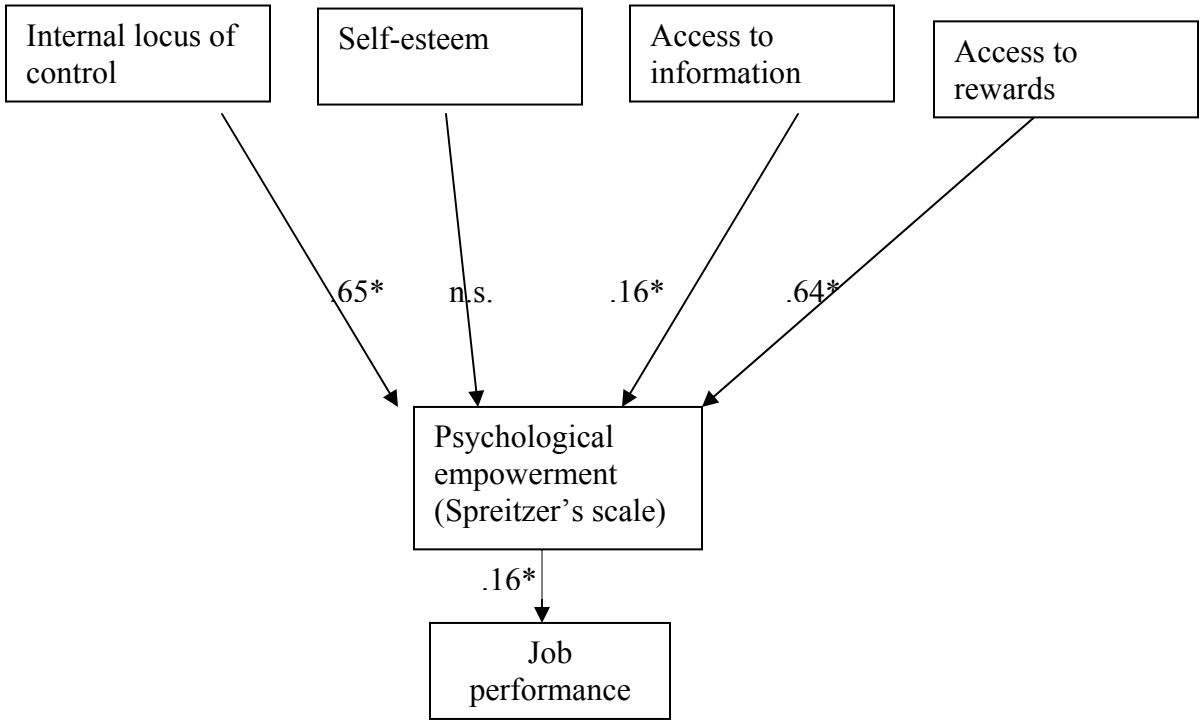

FIGURE 5: The Parameter Estimates of the Spreitzer's Model

part of the core essence of psychological empowerment. Instead, competence should be an antecedent of and meaningfulness and impact should be outcomes of psychological empowerment. Further, it was also pointed out earlier that intrinsic task motivation should be separated from the definition of psychological empowerment. The choice dimension was the only dimension that was not viewed as problematic in Thomas and Velthouse's (1990) and Spreitzer's (1995) conceptualization (Liden & Arad, 1996). Thus, an improvement of Spreitzer's (1995) theoretical model might be made by (a) using the choice dimension as the *sole* measure of psychological empowerment, (b) specifying competence as its antecedent, (c) specifying meaningfulness and impact as its outcomes, and (d) specifying intrinsic task motivation as its outcome. It was found that this model had equally acceptable fit compared to

Spreitzer's (1995) original model. The Chi-square value was 1941.51 ($p < .05$), RMSEA was .06, NNFI was .92, and CFI was .93. Among the various antecedents of sense of choice, internal locus of control, access to rewards, and sense of competence had demonstrated significant effects. Self-esteem and access to information, on the other hand, were not significant predictors. In terms of outcomes of sense of choice, it significantly predicted meaningfulness, impact, and intrinsic task motivation. The parameter estimates are given in Figure 6. Overall, then, this analysis indicated that some of the core components of Spreitzer's measure of psychological empowerment could be treated as antecedents or outcomes too, highlighting the need to re-conceptualize the construct of psychological empowerment.

Results of Hypotheses Testing

The hypotheses are summarized in Table 18. Further, the means, standard deviations, reliability estimates, and correlations among the study variables are given in Table 19. Hypothesis 1, the convergent validity hypothesis, predicted that the new measurement scale was related to job autonomy. Hypothesis 2, the discriminant validity hypothesis, predicted that the new measurement scale was distinct from (a) locus of control, (b) need for autonomy, and (c) social desirability. These two hypotheses were tested in the same SEM. The six variables of interest here—Expertise, Self-Regulation, job autonomy, locus of control, need for autonomy, and social desirability--were specified as a six-factor model in a SEM. The Chi-square value was 642.36 ($p < .05$), RMSEA was .06, NNFI was .91, and CFI was .92. Next, the inter-correlations between Expertise and job autonomy ($\varphi = .51$) and between Self-Regulation and job autonomy ($\varphi = .58$) were alternatively fixed to zero. The chi-square difference test indicated that the SEM with the inter-relationships between Expertise and job autonomy freely estimated had a better fit than the SEM with that relationship fixed to zero ($\Delta\chi = 55.7$, $p < .01$). Similarly, the

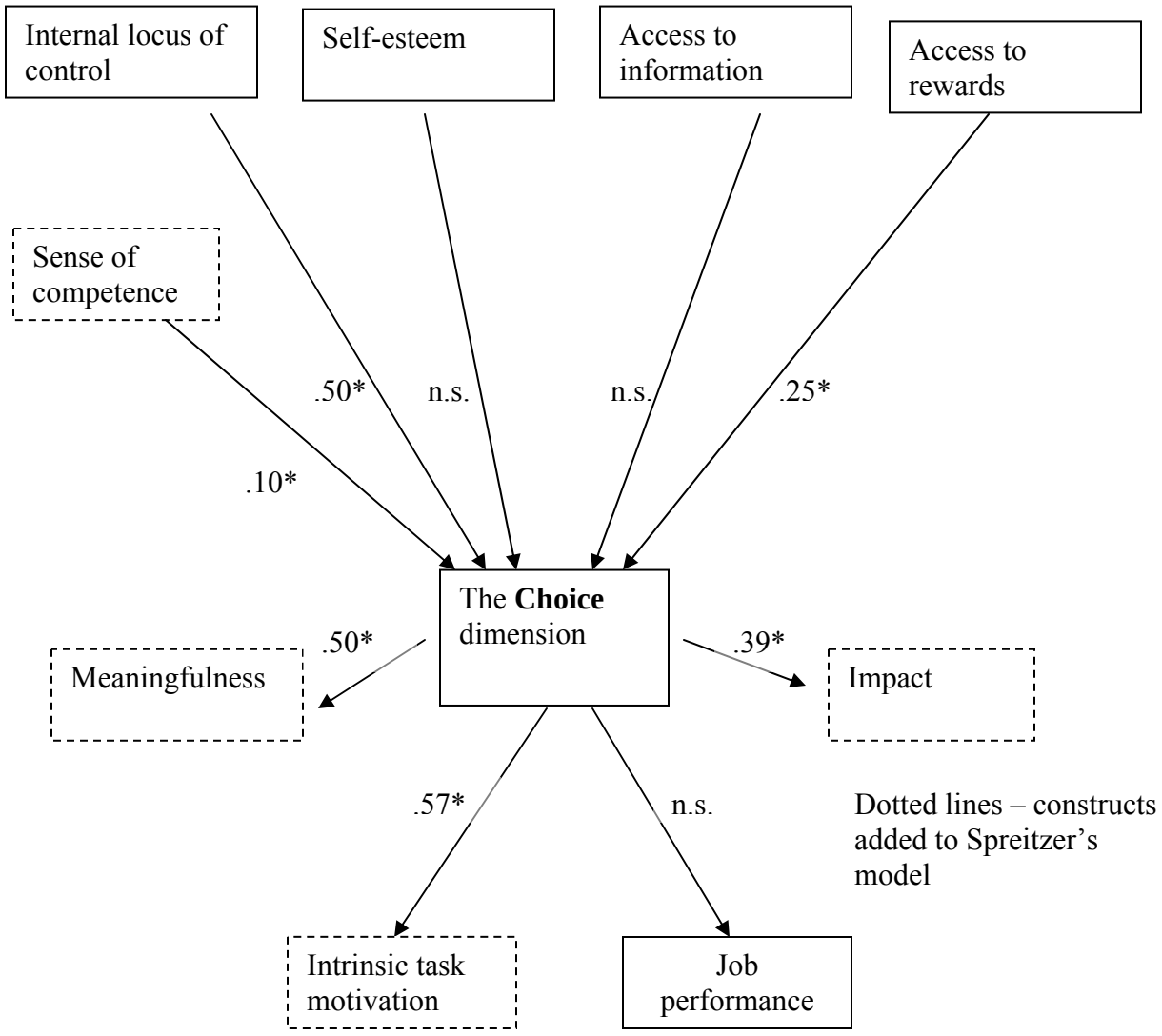

FIGURE 6: The Parameter Estimates of the Revised Spreitzer's Model

TABLE 18: Summary of Hypotheses

Hypothesis 1:	The new measurement scale is related to job autonomy.
Hypothesis 2:	The new measurement scale is distinct from (a) locus of control, (b) need for autonomy, and (c) social desirability.
Hypothesis 3:	The new measurement scale is positively related to (a) self-esteem, (b) access to information, (c) access to rewards, and (d) job performance.
Hypothesis 4:	The new measurement scale is more strongly related to (a) self-esteem, (b) access to information, (c) access to rewards, and (d) job performance than is Spreitzer's (1995) scale.
Hypothesis 5:	Locus of control (H5a), self-esteem (H5b), access to information (H5c), access to rewards (H5d), and sense of competence (H5e) are positively related to psychological empowerment.
Hypothesis 6:	Sense of competence partially mediates the effects of locus of control (H6a) and self-esteem (H6b) on psychological empowerment.
Hypothesis 7:	Psychological empowerment is positively related to meaningfulness (H7a), impact (H7b), and intrinsic task motivation (H7c).
Hypothesis 8:	Intrinsic task motivation partially mediates the effects of psychological empowerment (H8a), meaningfulness (H8b), and impact (H8c) on job performance.
Hypothesis 9:	Intrinsic task motivation partially mediates the effects of psychological empowerment (H9a), meaningfulness (H9b), and impact (H9c) on job satisfaction.

Table 19: Means, Standard Deviations, Reliability Estimates, and Correlations among the Study Variables

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. Expertise	(.77)															
2. Self-Regulation	**.29	(.74)														
3. Meaningfulness	**.30	*.12	(.90)													
4. Competence	**.31	**.18	**.26	(.86)												
5. Choice	**.27	**.26	**.26	**.18	(.80)											
6. Impact	**.44	**.54	**.17	**.20	**.29	(.72)										
7. Intrinsic job motivation	**.31	**.24	**.40	**.28	**.32	**.21	(.88)									
8. Job autonomy	**.40	**.44	**.15	**.20	**.35	**.27	**.32	(.70)								
9. Access to information	**.41	**.31	**.16	*.11	.08	**.27	*.14	**.26	(.80)							
10. Access to rewards	**.46	**.40	**.24	*.14	**.24	**.39	**.24	**.38	**.16	(.89)						
11. Locus of control	**.18	**.14	**.34	**.21	**.30	**.17	**.37	**.15	.08	**.22	(.68)					
12. Self-esteem	**.48	**.38	**.23	**.31	**.17	**.32	**.30	**.26	**.26	**.23	**.26	(.92)				
13. Need for autonomy	-.02	-.04	*-.11	.07	.05	.01	.02	-.10	-.11	-.01	.09	-.05	(.81)			
14. Social desirability	.07	.10	**.25	*.11	*.13	*.11	**.21	.04	.01	.08	**.29	**.19	*-.12	(.75)		
15. Job performance	**.28	*.13	**.17	**.21	.04	**.16	**.21	**.27	.07	**.17	*.11	**.26	.06	*.12	(.76)	
16. Job satisfaction	-.04	.09	*.13	-.03	**.16	.08	**.21	*.11	*-.14	**.23	**.21	-.04	**-.15	*.13	.07	--
Mean	3.15	3.36	4.07	4.03	3.74	3.34	4.23	3.42	3.26	3.27	4.06	3.61	2.74	3.72	3.64	3.99
Standard deviation	.85	.78	.78	.82	.81	.76	.70	.74	.70	.78	.49	.76	.69	.65	.94	.82

*Note. ** p < .01; * p < .05. N = 343 Reliability estimates are on the diagonal.*

chi-square difference test indicated that the SEM with the inter-relationships between Self-Regulation and job autonomy freely estimated had a better fit than the SEM with that relationship fixed to zero ($\Delta\chi = 73.1$, $p < .01$). This suggested that both dimensions of the new scale of psychological empowerment were significantly related to job autonomy. Hypothesis 1, therefore, received support.

With respect to Hypothesis 2, it was found that both Expertise and Self-Regulation were positively and statistically related to locus of control ($\varphi = .26$ and .18, respectively) and social desirability ($\varphi = .11$ and .16, respectively). Both dimensions did not have statistically significant association with need for autonomy. Next, the relationship between Expertise and each of the three constructs was alternatively fixed to a value of one. The change in model fit is given in Table 20. As indicated in the Table, model fit was significantly worsened by these constraints, suggesting that the Expertise dimension of psychological empowerment was distinct from locus of control, need for autonomy, and social desirability. The same analysis was repeated for the Self-Regulation dimension of psychological empowerment. The same results were observed in that Self-Regulation was distinct from locus of control, need for autonomy, and social desirability.

Further, the relationship between psychological empowerment and job autonomy was compared to the relationship between psychological empowerment and locus of control, need for autonomy, and social desirability by placing equality constraints on these relationships in SEM. The expectation was that psychological empowerment should be more strongly related to job autonomy than to locus of control, need for autonomy, and social desirability because job autonomy was, as reasoned previously, conceptually convergent with psychological empowerment whereas the other three constructs were distinct from psychological empowerment.

TABLE 20: Results of Testing Hypothesis 2

Dimension of Psychological Empowerment	**Correlate**	φ in the unconstrained model	Δχ after adding the constraint of φ = 1
Expertise	Locus of control	.26*	234.80*
	Need for autonomy	.01	499.34*
	Social desirability	.11*	481.90*
Self-Regulation	Locus of control	.18*	246.05*
	Need for autonomy	-.08	300.03*
	Social desirability	.16*	290.82*

Note. * $p < .05$

It was found that the fit of the SEM was significantly worsened when the relationship between Expertise and job autonomy (φ = .51) was fixed to be equal to the relationship between Expertise and locus of control (φ = .26), suggesting that the relationship between Expertise and job autonomy was significantly stronger than the relationship between Expertise and locus of control. The same analysis was performed for the remaining variables. The results are summarized in Table 21. As can be seen in the Table, the relationship between Expertise and job autonomy was significantly stronger than the relationships between Expertise and locus of control, need for autonomy, and social desirability as expected. Similarly, the relationship between Self-Regulation and job autonomy was also significantly stronger than the relationships between Self-Regulation and locus of control, need for autonomy, and social desirability as expected. Overall, then, Hypotheses 2a, 2b, and 2c received support.

TABLE 21: Discriminant and Convergent Validity

Relationship (φ)	**Relationship (φ)**	Δχ after adding the equality constraint
Expertise – job autonomy (φ = .51)	Expertise - Locus of control (φ = .26)	9.54*
	Expertise - Need for autonomy (φ = .01)	26.85*
	Expertise - Social desirability (φ = .11)	20.15*
Self-Regulation – job autonomy (φ =.58)	Expertise - Locus of control (φ = .18)	22.07*
	Expertise - Need for autonomy (φ = -.08)	48.92*
	Expertise - Social desirability (φ = .16)	24.04*

Note. * p < .05

Hypothesis 3 was related to the nomological validity of the new scale of psychological empowerment. Specifically, it predicted that the new measurement scale was positively related to (a) self-esteem, (b) access to information, (c) access to rewards, and (d) job performance. Hypothesis 4 predicted that the new measurement scale was more strongly related to (a) self-esteem, (b) access to information, (c) access to rewards, and (d) job performance than was Spreitzer's (1995) scale. These hypotheses were tested in the same SEM. Specifically, the four variables —self-esteem, access to information, access to rewards, and job performance—were specified as correlates of both the new and Spreitzer's psychological empowerment scales. The Chi-square value for this SEM was 2043.28 ($p < .05$), RMSEA was .06, NNFI was .94, and CFI was .94.

It was found that the coefficients representing the relationships between the new scale of psychological empowerment (which was specified as a second-order factor represented by the Expertise and Self-Regulation dimensions) and the variables of interest were significantly

different from zero except for job performance. This suggested that the new scale of psychological empowerment predicted self-esteem ($\gamma = .38$), access to information ($\gamma = .34$), and access to rewards ($\gamma = .27$), thus demonstrating nomological validity. Hypotheses 3a, 3b, and 3c were, therefore, supported. H3d, on the other hand, was not supported.

With respect to Hypothesis 4, the coefficients representing the relationships between Spreitzer's (1995) measure of psychological empowerment (which was specified as a second-order factor represented by the four underlying dimensions) and the variables of interest were compared with the coefficients representing the relationships between the new measure of psychological empowerment (which was also specified as a second-order factor represented by the Expertise and Self-Regulation dimensions) and the same variables of interest by placing equality constraints between these two sets of coefficients. If the fit of the overall model with equality constraints significantly worsened compared to the model without the equality constraint, it would suggest that the equality constraint was unwarranted, and therefore, the gammas for the relationships between psychological empowerment and the variables of interest were not the same for the Spreitzer's operationalization and the new operationalization of psychological empowerment. The results, along with the explained variance, are given in Table 22.

As indicated in the Table, the fit of the SEM was significantly worsened compared to the SEM without the equality constraint, suggesting that the equality constraint was unwarranted. Therefore, it appeared that the effect sizes for the relationship between psychological empowerment and self-esteem ($\gamma = .38$ vs. .20), access to information ($\gamma = .34$ vs. .02), and access to rewards ($\gamma = .27$ vs. .16) were not the same for the two measures of psychological empowerment. The results using equality constraints further indicated that the

TABLE 22: Results of Testing Hypothesis 4

Relationship Examined	Γ in the unconstrained model	R^2	Δχ increase after adding the equality constraint on γ
New measure → Self-esteem	.38*	60%	--
New measure →Access to information	.34*	49%	--
New measure →Access to rewards	.27*	57%	--
New measure →Self-reported job performance	.16	13%	--
Spreitzer's measure →Self-esteem	.20*	38%	8.37*
Spreitzer's measure →Access to information	.02	13%	13.56*
Spreitzer's measure →Access to rewards	.16*	37%	4.25*
Spreitzer's measure →Self-reported job performance	.19*	15%	.20

Note. * $p < .05$

effect sizes for the new scale of psychological empowerment were larger than those from Spreitzer's scale, providing support for Hypotheses 4a, 4b, and 4c. On the other hand, no significant difference was found in predicting job performance between the two measures of psychological empowerment (γ =.19 vs. .16). Hypothesis 4d, therefore, was not supported.

Hypotheses 5 to 9 were based on the proposed theoretical model (see Figure 4). In testing the tenability of a theoretical model in covariance structure analysis, it is important to ensure a sufficient level of power in order to reduce type II error – failure to reject the null hypothesis when it is false. MacCallum, Browne, and Sugawara's (1996) table indicated that when the degree of freedom for the testing model was above 100 and sample size was 300, the power level would approach 1.0. Because the testing model had a degree of freedom of 850 and the sample size was close to 300, this suggested that the current covariance structure analysis appeared to have sufficient power.

Hypothesis 5 was related to the antecedents of psychological empowerment in the model. It predicted that locus of control (H5a), self-esteem (H5b), access to information (H5c), access to rewards (H5d), and sense of competence (H5e) were positively related to the new measure of psychological empowerment. Hypothesis 6 was a mediational hypothesis. It predicted that sense of competence partially mediated the effects of locus of control (H6a) and self-esteem (H6b) on the new measure of psychological empowerment. Hypothesis 7 was related to the outcomes of psychological empowerment in the model. It predicted that the new measure of psychological empowerment was positively related to meaningfulness (H7a), impact (H7b), and intrinsic task motivation (H7c). Finally, Hypotheses 8 and 9 were also mediational hypothesis. They predicted that intrinsic task motivation partially mediated the effects of psychological empowerment, meaningfulness, and impact on job performance and satisfaction.

These hypotheses were tested in two steps. In the first step, these hypothesized relationships were specified in a SEM. The proposed model fit the data quite well. The Chi-square value was 1936.77 ($p < .05$), degree of freedom was 847, RMSEA was .06, NNFI was .93, and CFI was .93. These fit indices were comparable to what was found for both the original Spreitzer's model and its variant based on the literature. All the structural paths were significant and in the expected directions with a few exceptions. The exceptions included the path between locus of control and sense of competence, the path between locus of control and psychological empowerment, and the path between impact and intrinsic task motivation. Overall, with respect to the predictor side of the proposed model, Hypotheses 5b, 5c, 5d, and 5e were supported. H5a (for locus of control) was not supported. With regard to the outcome side of the proposed model, H7a, H7b, and H7c were all supported. Figure 7 provides the parameter estimates of this model.

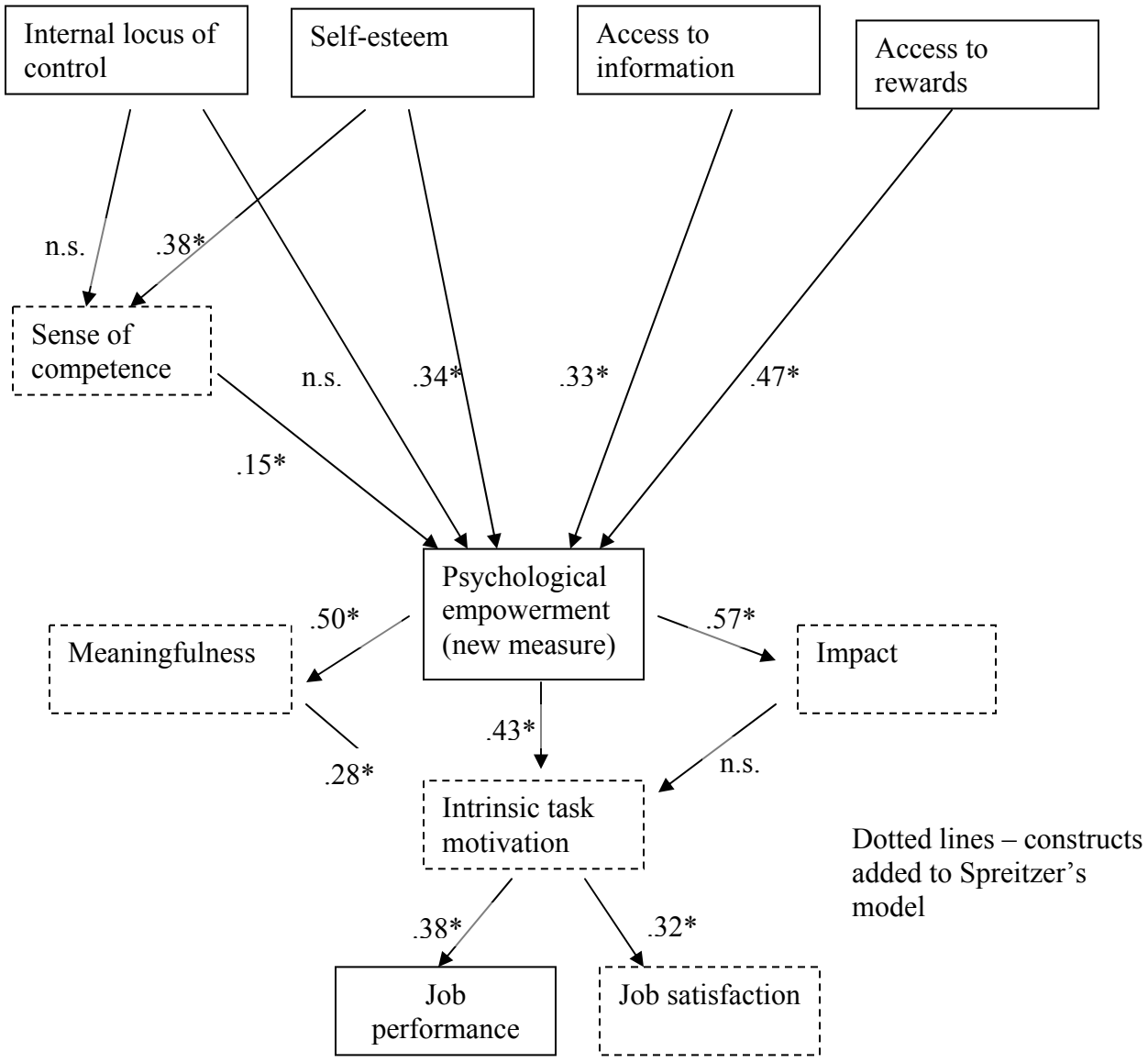

FIGURE 7: The Parameter Estimates of the Proposed Theoretical Model

In the second step, the tenability of the three mediational hypotheses was specifically examined. With respect to the mediating role of sense of competence, it was observed that the proposed predictor of self-esteem was significantly related to sense of competence, and sense of competence in turn was significantly related to psychological empowerment. This indicated that

sense of competence mediated the effect of self-esteem on psychological empowerment (James et al., 2006), supporting the mediational hypothesis H6b. The mediation was a partial one because self-esteem also had a direct effect on psychological empowerment. H6a (for locus of control) was not supported.

Next, it was observed that psychological empowerment and meaningfulness were significantly related to intrinsic job motivation, and intrinsic job motivation in turn was significantly related to job performance, suggesting that intrinsic job motivation mediated the effects of both psychological empowerment and meaningfulness on job performance (James et al., 2006). The mediational hypotheses of H8a and H8b were therefore supported. H8c (for impact) was not supported. Further, the mediational hypotheses of H9a and H9b also received support because psychological empowerment and meaningfulness were related to intrinsic task motivation, which in turn was related to job satisfaction.

In an exploratory fashion, the job design factor of job autonomy was added to the proposed model to see if it played any significant role in the model. Specifically, based on the empirical support for H1, job autonomy was expected to predict psychological empowerment. It was found that, after the addition of job autonomy to the model, all the empirical results observed above in terms of the pattern of significant relationships remained unchanged. Further, job autonomy was a significant predictor of the new measure of psychological empowerment. The Chi-square value for this updated model was 2103.17 ($p < .05$), RMSEA was .06, NNFI was .93, and CFI was .94.

Summary of Results

Overall, most of the hypotheses received empirical support. It was found that psychological empowerment was best represented by two dimensions, Expertise and Self-

Regulation. These two dimensions demonstrated acceptable psychometric properties. Specifically, Expertise and Self-Regulation were related to other variables that captured a similar content domain (job autonomy), demonstrating convergent validity. Moreover, Expertise and Self-Regulation were distinct from the personality traits of locus of control, need for autonomy, and social desirability, demonstrating discriminant validity. Further, these two dimensions of psychological empowerment were also associated with self-esteem, access to information, and access to rewards, demonstrating nomological validity. The new scale of psychological empowerment also demonstrated greater predictive power of some of these correlates compared to Spreitzer's (1995) scale.

It was also found that psychological empowerment, as operationalized by the new scale, played an important role in understanding employees' organizational attitudes and behaviors. Specifically, psychological empowerment was predicted by a wide range of factors, including personality traits (e.g., self-esteem), characteristics of work environment (e.g., access to information and rewards), and job design factors (e.g., job autonomy). Unlike previous researchers who suggested that sense of competence was a part of psychological empowerment, support was found for the assertion that sense of competence was an antecedent of psychological empowerment. With respect to outcomes of psychological empowerment, it was found that psychological empowerment predicted intrinsic task motivation, sense of meaningfulness, and sense of impact. These three correlates were conceptualized as a part of the core essence of psychological empowerment by previous researchers. Further, intrinsic task motivation was found to mediate the effects of psychological empowerment on self-reported job performance and job satisfaction. Table 23 provides a summary of the empirical results in this study.

TABLE 23: Summary of Results of Hypothesis Testing

Hypothesis 1: **(supported)**	The new measurement scale is related to job autonomy.
Hypothesis 2: **(all supported)**	The new measurement scale is distinct from (a) locus of control, (b) need for autonomy, and (c) social desirability.
Hypothesis 3: **(H3a, H3b, H3c supported)**	The new measurement scale is positively related to (a) self-esteem, (b) access to information, (c) access to rewards, and (d) job performance.
Hypothesis 4: **(H4a, H4b, H4c supported)**	The new measurement scale is more strongly related to (a) self-esteem, (b) access to information, (c) access to rewards, and (d) job performance than is Spreitzer's (1995) scale.
Hypothesis 5: **(H5b, H5c, H5d, and H5e supported)**	Locus of control (H5a), self-esteem (H5b), access to information (H5c), access to rewards (H5d), and sense of competence (H5e) are positively related to psychological empowerment.
Hypothesis 6: **(H6b supported)**	Sense of competence partially mediates the effects of locus of control (H6a) and self-esteem (H6b) on psychological empowerment.
Hypothesis 7: **(all supported)**	Psychological empowerment is positively related to meaningfulness (H7a), impact (H7b), and intrinsic task motivation (H7c).
Hypothesis 8: **(H8a and H8b supported)**	Intrinsic task motivation partially mediates the effects of psychological empowerment (H8a), meaningfulness (H8b), and impact (H8c) on job performance.
Hypothesis 9: **(H9a and H9b supported)**	Intrinsic task motivation partially mediates the effects of psychological empowerment (H9a), meaningfulness (H9b), and impact (H9c) on job satisfaction.
Additional analyses	Job autonomy was a significant predictor of psychological empowerment.

CHAPTER VII

DISCUSSION

Thomas and Velthouse (1990) were the first to propose a psychological perspective of empowerment based on the premise that empowerment policies and practices would not be effective if employees do not interpret them as empowering. They defined psychological empowerment as employees' intrinsic task motivation manifested in four job-related cognitions: meaningfulness, competence, choice, and impact. However, as discussed in Chapter III, their conceptual definition of psychological empowerment has some conceptual shortcomings. Thus, the organizational behavior literature is in need of an alternative definition of psychological empowerment that retains the positive features of Thomas and Velthouse's (1990) view and yet does not have the outlined conceptual shortcomings. Addressing this need, the major goal of this study was to provide a re-conceptualization of the construct of psychological empowerment. In so doing, a measurement scale for the new definition was developed and empirically tested. Further, a theoretical model was examined that included some major antecedents and outcomes of psychological empowerment (as operationalized by the new measurement scale).

Has the current study successfully attained the goal of re-conceptualizing the construct of psychological empowerment? Based on the current empirical evidence presented, it appears that this goal was at least partially achieved. Theoretically speaking, the current re-conceptualization of psychological empowerment is grounded in the well-supported behavioral approach/inhibition theory of power (Anderson and Berdahl, 2002; Galinsky et al., 2003; Keltner et al., 2003), which suggests that when individuals have power, they have an increased proclivity to act and make

more choices and accept more responsibilities. It is this sense of choice-making and responsibility that characterize the core content domains of the new definition of psychological empowerment. Further, the new definition of psychological empowerment also retains the positive features of Thomas and Velthouse's (1990) research, which is an emphasis on psychological processes and on a sense of choice in empowered individuals. Overall, the current study provides the organizational sciences with a more theory-grounded definition of psychological empowerment. Van de Ven (1989) emphasizes that the tensions, inconsistencies, and contradictions in research provide critical opportunities to develop better theories. This is certainly the case in empowerment research. As the notion of empowerment becomes popular in research and in practice, there is a strong need to ensure that psychological empowerment is appropriately defined. The current study fulfilled this need by providing a new definition of psychological empowerment based on a prominent theory in the social psychology literature.

The empirical evidence collected in the current study also indicated that the goal of re-conceptualizing psychological empowerment was achieved. Specifically, the current study developed and tested a measurement scale based on the new definition of psychological empowerment. With data collected from two organizations, the current study established an eight-item scale to measure the new definition of psychological empowerment. This scale has two dimensions—Expertise and Self-Regulation. Expertise corresponded to part of the definition of psychological empowerment used in the current study—a psychological state in which individuals are aware that they have the freedom to <u>have influence over</u> the ideas, decisions, actions, and standards of quality in undertaking their areas of job duties. Self-Regulation corresponded to part of the current definition of psychological empowerment—a psychological state in which individuals are aware that they have the freedom to <u>take the</u>

responsibility for the ideas, decisions, actions, and standards of quality in undertaking their areas of job duties. Thus, the new scale is conceptually consistent with the proposed definition of psychological empowerment.

Moreover, the new scale of psychological empowerment demonstrated acceptable psychometric properties, including internal consistency, convergent validity, discriminant validity, nomological validity, generally greater predictive power compared to Spreitzer's (1995) scale, and low susceptibility to measurement bias. Specifically, it was found that items of the new scale were internally consistent. Further, this new scale was related to constructs of similar conceptual domains, such as job autonomy, but was distinct from constructs of different conceptual nature including locus of control and need for autonomy. Further, it was empirically associated with some important constructs in the empowerment literature such as access to information and availability of rewards. Moreover, it was more strongly associated with most of the variables of interest examined than was Spreitzer's (1995) scale. Finally, it was found that the new scale of psychological empowerment was not seriously affected by social desirability and self-reported method bias. Overall, then, the current study provides the literature with a psychometrically sound measure of psychological empowerment that captures the core content domains of the new definition of psychological empowerment. This attempt is significant and timely because the interest in the psychological perspective of empowerment continues to grow in recent years (e.g., Avolio et al., 2004; Gagne et al., 1997; Koberg et al., 1999; Kraimer et al., 1999; Laschinger et al., 2004; Liden et al., 2000; Seibert et al., 2004; Spreitzer et al., 1997; 1999). The new scale of psychological empowerment established in the current study allows organizational researchers to empirically examine their theoretical assertions related to psychological empowerment.

Finally, the goal of re-conceptualizing the construct of psychological empowerment was attained through testing the role of the new definition of psychological empowerment in a theoretical model that included some major antecedents and outcomes of psychological empowerment. This model was based on Spreitzer's (1995) theoretical model in which locus of control, self-esteem, access to information, access to rewards were antecedents of psychological empowerments and job performance was the outcome. However, based on theoretical reasons, some of the components of Spreitzer's (1995) measure of psychological empowerment were re-specified in the proposed model as either antecedents or outcomes. Specifically, in the model tested, support was found for the assertion that sense of competence was an antecedent of and intrinsic task motivation, meaningfulness, and outcomes were outcomes of psychological empowerment. Therefore, the empirical results observed in the tested model alert researchers to the importance of differentiating the essence of a construct with its correlates. As suggested by organizational theorists, having a clear understanding of the "what" nature of a construct is important to building valuable theories (Osigweh, 1989; Whetten 1989). The current attempt to re-conceptualize psychological empowerment and clarify what psychological empowerment is or is not in this study is highly needed at this point of the development of the literature. Further, the acceptable fit indices associated with the tested model suggested that the new definition of psychological empowerment has a significant role in the net of "mainstay" variables within the organizational sciences (e.g., sense of competence, job motivation, availability of rewards, job satisfaction, performance, etc.).

Sense of Expertise and Self-Regulation

Like Spreitzer's (1995) scale, the new scale of psychological empowerment is also multi-dimensional. However, unlike Spreitzer's scale, the new measure involves the two core

dimensions of Expertise and Self-Regulation rather than meaningfulness, competence, choice, and impact. In fact, these two dimensions (Expertise and Self-Regulation) are conceptually consistent with the proposed definition of psychological empowerment, which is a psychological state in which individuals are aware that they have the freedom to take responsibility for and have influence over the ideas, decisions, actions, and standards of quality in undertaking their areas of job duties. Those who are psychologically empowered are aware that they have influence over different aspects of their jobs because they see themselves as experts at their jobs. Psychologists also suggest that possession of power means having the ability to provide valued resources (Anderson & Berdahl, 2002; Lee, 1995), similar to experts being able to provide others with their expertise. Further, those who are psychologically empowered are also aware of the responsibility associated with the influence that they have because of their self-regulation. As Forrester (2000) points out, when employees have more power, they also must become more accountable for results or outcomes at work. Psychologically empowered individuals accept this increased accountability.

These two dimensions—Expertise and Self-Regulation—also help make sense of past research on power. For instance, Galinsky et al. (2003) found that those subjects who were primed to believe they had power were more likely to turn off an annoying fan in the room (regardless of a lack of clear permissibility to do so) than those who were primed to believe they were powerless. This is perhaps because those who believed that they had power had a stronger sense of self-regulation, and therefore were likely to take action to improve the situation without fear of punishment. Conversely, Anderson and Berdahl (2002) found that those subjects possessing a low sense of power inhibited themselves from expressing their true attitudes, kept their disagreement to themselves, and expressed agreement even when they disagreed. This is

perhaps because those without power had a low sense of expertise, and therefore were unwilling to reveal their attitudes when they anticipated disagreement from others.

It is important to note here that Expertise is not the same as the dimension of competence proposed by Thomas and Velthouse (1990). Thomas and Velthouse (1990) suggest that empowered individuals have confidence in performing their jobs and mastery of necessary skills. Expertise is based, in part, on a sense of competence in performing tasks (Farrington-Darby & Wilson, 2006), but is broader such that it involves the perception that one is highly knowledgeable about and skillful at performing every aspect of the job as well as the expectation to make decisions or strategies related to the job (Shanteau, 1992). This is consistent with the current conceptualization that psychological empowerment involves an active orientation at work. This distinction was also evident empirically as the Expertise dimension was found to be related to, but not the same as. the competence dimension (Factor correlation = .37).

Further, both Expertise and Self-Regulation were found to be empirically distinct from the choice dimension. In fact, the choice dimension, which is the extent to which one's job behaviors are initiated by oneself (Thomas & Velthouse, 1990), shares a conceptual domain that is somewhat similar to the new definition of psychological empowerment proposed in this study. However, this dimension of Thomas and Velthouse's (1990) perspective of psychological empowerment is conceptually very broad (e.g., what kind of job behaviors? How is the initiation manifested at work?) and, therefore, not specific enough to characterize an empowered mindset. How are psychologically empowered individuals think differently compared to those who are not psychologically empowered? This mindset governs how empowered individuals approach their work attitudinally and behaviorally, and therefore is worth more specific characterizations. The current study suggests that those who are empowered think of themselves as experts of their jobs

to make active influences on different aspects of their jobs and also possess a strong sense of self-regulation to accept the responsibility for decisions, learn from the consequences, and actively improve. This is consistent with the current conceptualization that psychological empowerment involves an increased proclivity to act. Thus, the Expertise and Self-Regulation dimensions appear to be an improvement upon the choice dimension in that it more specifically highlights how empowered individuals may think (and therefore act) at work.

However, it should be noted that these two dimensions of psychological empowerment, Expertise and Self-regulation, are still in need of refinement. For instance, the current study reported an acceptable but not extremely high level of internal consistency for the measurement scales for both dimensions. The internal consistency may, therefore, be further improved, for instance, by modifying the wording of the items or adding other items of similar conceptual domains (Cortina, 1993). While the current study took the first step toward a complete and successful re-conceptualization of psychological empowerment, more efforts, however, are still needed to promote the use of this new definition within the organizational sciences.

Implications for Theory and Practice

Findings from the current study have both theoretical and managerial implications. In terms of theoretical implications, this study highlights the need to examine the detailed processes by which effective empowerment occurs. When the concept of empowerment started to emerge, it was often examined from a structural perspective—the policies and procedures that organizations execute to share power with employees (e.g., Kanter, 1979). On the other hand, similar to other empowerment studies (e.g., Conger & Kanungo, 1988), the current study maintains that for empowerment to operate, researchers need to have a better understanding of the mechanisms by which empowerment practices and policies affect outcomes. It is illustrated

in this study that psychological empowerment plays an important role in mediating work relationships, such as between sense of competence and work motivation. The lack of attention given to these psychological processes may explain why some researchers observe that the supposedly positive effects of empowerment policies and practices on employees are often not fully seen (e.g., Argyris, 1998; Forrester, 2000; Griggs & Manring, 1991; Thorlakson & Murray, 1996). This psychological perspective of empowerment, therefore, warrants further attention and expansion from organizational researchers.

Related to the above point, psychological empowerment appears to be a useful variable that helps us understand employees' psychological processes at work, as evident in its mediating role in various relationships in the proposed model. Specifically, it was found that four predictors (access to information, access to rewards, job autonomy, and self-esteem) were significantly related to psychological empowerment, and psychological empowerment, in turn, was related to three important work outcomes including meaningfulness, impact, and intrinsic task motivation. These results indicated that psychological empowerment may be able to help researchers explain some work variable relationships and address *why* certain relationships exist, an important element for theory building (Van de Ven, 1989; Whetten, 1989). For instance, some researchers have suggested that those with a high level of self-esteem are likely to be more motivated to work on their job tasks (e.g., Deci & Ryan, 1995; Mruk, 1995). One of the explanations is that those who have a high level of self-esteem are likely to have a stronger sense of psychological empowerment, which in turn enhances intrinsic task motivation. Only a few researchers, however, have examined this mediational role of psychological empowerment in organizational behavior research (e.g., Liden et al., 2000).

Further, the current study illustrates that psychological empowerment is a product of personal and environment factors. As such, theories of psychological empowerment need to take into consideration of variables of different nature. For instance, it was found that different characteristics of the work environment played a role in predicting psychological empowerment. Specifically, access to information, access to rewards, and job autonomy were positively related to psychological empowerment. These findings were in line with other studies which suggested or found that employee empowerment can be achieved through changes in the work environment (e.g., Koberg et al., 1999; Kraimer et al., 1999; Liden et al., 2000; Peterson & Speer, 2000; Robbins, Crino, & Fredendall, 2002; Siegall & Gardner, 2000). On the other hand, the current study also found that several personality traits were related to psychological empowerment. These traits included self-esteem and locus of control. Thus, even though employees' psychological empowerment is susceptible to the influence of the work environment, a part of it may still be determined by personality—personality traits may govern people's cognitions and beliefs, thus directly influencing the subjective judgment of empowerment experiences (Robbins et al., 2002). Two important research avenues that may promote a more balanced perspective on psychological empowerment are (a) directly comparing the effects of work environment versus those of dispositional traits on psychological empowerment, and (b) investigating how effects of work environment on psychological empowerment may be moderated by one's dispositional tendencies, or, conversely, how effects of dispositional tendencies on psychological empowerment may be moderately by the characteristics of work environment.

Further, unlike previous researchers (Conger & Kanungo, 1988; Spreitzer, 1995; Thomas & Velthouse, 1990) who suggest that psychological empowerment is a motivational construct, this study proposed and found support for an alternative relationship in the theoretical model,

which is that intrinsic task motivation is an outcome of psychological empowerment (Gagne et al., 1997). Thus, even though a "motivational perspective of empowerment" has been enacted and discussed (Conger & Kanungo, 1988; Spreitzer, 1995; Thomas & Velthouse, 1990), extra care is needed to theorize how this motivational perspective is manifested. It appears that equating psychological empowerment as a motivational experience lacks strong theoretical and empirical justification. For instance, Menon (2001) suggests that if empowerment is equivalent to intrinsic task motivation, then it should not enjoy its current status as an independent construct of interest. On the other hand, the proposed model specifies that intrinsic task motivation is an outcome of psychological empowerment—a psychological state in which one is aware that one can have the freedom to take responsibility for and have influence over different aspects of one's job. When the person possesses this mindset, a logical outcome is greater effort given to work tasks because the belief that one can have a great deal of control or influence over one's work is the foundation for intrinsic task motivation (Deci and Ryan, 1991).

Another research implication is related to measurement issues. Overall, the current empirical findings suggest that psychological empowerment is a construct which is rather insulated from positive responses biases. Specifically, it was found that self-reported psychological empowerment was not substantially biased by common method bias, and that it is only weakly related to social desirability. In fact, these findings are also consistent with some previous research finding that negative affectivity, a frequently examined source of response bias (Williams & Anderson, 1994), did not bias respondents' reported psychological empowerment (Carless, 2004). One of the speculated reasons for these observed results may be that, as argued in the earlier Chapters, psychological empowerment involves increased responsibility and, therefore, is not necessarily desired by all employees (Wilkinson, 1998). Forrester (2000)

emphasized that empowerment makes employees accountable for the performance results, and some employees may prefer not to have that responsibility. Therefore, unlike the constructs of job satisfaction or fairness, for example, which often are susceptible to response biases because a higher level of these variables is always more desirable to respondents, psychological empowerment may not always be considered fully desirable. This may be one of the reasons why constructs that measured response biases (self-reported method bias factor, social desirability, positive or negative affectivity, etc.) may not have an evident or systematic effect on self-reported psychological empowerment.

Finally, this study has important managerial implications. It is critical for managers to create an empowerment mindset if they want to promote organizational effectiveness through empowerment (Seibert et al., 2004). This mindset, once formed, may govern the way employees attitudinally and behaviorally approach their daily work (Conger & Kanungo, 1988; Thomas & Velthouse, 1990). Empowered employees are likely to be aware of the freedom to influence different aspects of their job tasks and accept the responsibility associated with it. This study highlights these important aspects of an empowerment mindset. Understanding these aspects is important because managers need to make observations and inferences about whether employees share an empowerment mindset if they are to monitor the effectiveness of empowerment. Further, managers themselves may often be the group of employees that organizations want to empower (Proctor, Currie, & Orme, 1999). As such, managers increasingly need to have a better understanding of the nature and correlates of psychological empowerment so that they can react to organizations' empowerment efforts more properly (Wilkinson, 1998).

Limitations of this Study

While the current study provides insight into the theoretical nature of psychological empowerment and empirical evidence for its nomological network, the interpretation of the findings from the current study should take into consideration of the following limitations. They are the (a) reliance on self-report data, and (b) cross sectional nature of data.

The first limitation is that all variables measured were self-reported. As such, the findings may be affected by common method variance, which is a source of influence due to the fact that variables are measured using the same method (e.g., self-report) (Podsakoff et al., 2003). However, this study focuses mostly on psychological or perceptual variables (e.g., psychological empowerment, personality traits), which are necessarily measured using self-report. Even though job performance is not psychological in nature, it was still measured using self-reported method largely because participating organizations were reluctant to use objective performance measures which would have involved a matching procedure that might make their employees uncomfortable or unwilling to participate. Nevertheless, like other researchers (Richardson & Vandenberg, 2005), the survey included a self-reported method factor composed of five items that were not theoretically related to one another nor to the goal of this study, such that the common underlying cause of these five items should more or less reflect method variance only. It was found that these five items did not hold together well as a single factor, suggesting that the problem of common method bias is not serious. Finally, researchers suggest that the problem of common method bias may be over-exaggerated. For instance, Fried and Ferris' (1987) review indicates that self-report variables demonstrate similar relationships with other-reported variables across multiple studies. In fact, Fried and Ferris (1987) conclude that the problem of using self-report data to examine work perceptions may not be as serious as some researchers suggest.

Crampton and Wagner (1994) also observed that relationships involving only self-report perceptual variables were not necessarily inflated. However, it would be interesting for future research to examine others' perceptions or ratings of employee's psychological empowerment and their roles in empowerment theories.

Another limitation of the current study is that the measurement was cross-sectional. That is, all variables were measured at the same time point. As such, causal directions cannot be inferred. That is, even though the proposed theoretical model received empirical support in this study, it is important to note that the model does not indicate causation (regardless of the use of one-way arrows in the Figures). However, the objective of the current study is to provide a foundation on which future research can be based. This objective is met because this study demonstrates the various aspects of validity of a scale purported to measure the new definition of psychological empowerment. Further, the reasoning in the nature of the construct of psychological empowerment as well as its relationship with other constructs is grounded in theories. Therefore, even though the measurement was cross-sectional in nature, it is expected that the significant findings observed in the current study will be duplicated in longitudinal studies. However, longitudinal studies are certainly needed to allow for a stronger inference of causation in the future.

Directions for Future Research

There are multiple future research avenues that are worthy of attention. They are (a) expanding the proposed theoretical models by examining other potential correlates, (b) identifying boundary conditions and moderators that change the roles of psychological empowerment at work, (c) using experimental studies to examine certain research questions, (d) examining cultural differences in psychological empowerment and its correlates, (e) studying

psychological empowerment in team settings, and (f) studying the potential negative effects of psychological empowerment on individuals' and therefore organizations' proper functioning. These research avenues are discussed below.

The current study did not test for other possible alternative models because the proposed theoretical model was meant to largely resemble Spreitzer's (1995) original model. Therefore, the search for other significant but alternative paths between the constructs was not undertaken to preserve the original Spreitzer's model as closely as possible. For similar reasons, the model was not expanded to include other variables at this juncture. However, there are certainly other variables that could be included to gain a more complete understanding of the phenomenon of psychological empowerment. For instance, in terms of individual differences, the personality trait of proactivity (Bateman & Crant, 1993) may predispose individuals to feel psychologically empowered because those who are proactive identify opportunities and act on them, show initiative, and persevere until they attain their goals. This mindset may propel individuals to be more aware of the freedom that they enjoy to influence their jobs. Other individual differences including other personality traits (e.g., Big Five personality factors, self-monitoring, etc.), values, and interests should also be examined. In terms of job factors, this study examined the positive job characteristic of autonomy. Future research should also examine structural job factors (e.g., job level, centrality of job position) and negative job factors (e.g., role conflict, role ambiguity, role overload). These structural constraints and negative job experiences may be related to psychological empowerment because they limit or reduce one's psychological energy to take an active role at work (Beehr, 1995).

In terms of environmental work factors, future research should examine how the social environment may affect psychological empowerment (Spreitzer, 1996). This includes, for

example, relationships with supervisors, social integration at work, and social network characteristics. Because the social environment can influence the availability of both tangible and psychological resources (Hobfall, Johnson, Ennis, & Jackson, 2003), it may also change people's proclivity to take on more active roles at work in terms of making decisions related to their work. Finally, in terms of outcomes, psychological empowerment may have the potential to relate to a variety of attitudinal and behavioral variables. For instance, because psychological empowerment involves a mindset that focuses on autonomy and taking initiative, it may also be related to citizenship behaviors and absenteeism. Overall, more research is still needed to examine other variables of interest or specify alternative patterns of relationships among the study variables in the current study in order to have a better understanding of the nature and value of the construct within the organizational sciences. In the latter case, longitudinal research will be particularly useful.

Moreover, future research should look at some potential moderators of the relationships examined in this study. It is possible that the effects observed in this study may change depending on other conditions. Identifying these conditions can help build an organizational theory of psychological empowerment that takes into account different boundary conditions. For instance, the effect of job design factors on psychological empowerment may change depending on employees' turnover intentions. For those employees who have a high level of turnover intention, favorable job design factors may have only limited effects on their psychological empowerment because they may want to limit their dedication and responsibilities at work to facilitate ease of leaving. As another example, the relationship between psychological empowerment and work motivation may be affected by one's ambition (or career goals). While those who are psychologically empowered are more motivated to work on their job tasks, the

effect may be even stronger for those who are more ambitious because they see that their goals are more likely to be satisfied when they are given more autonomy and opportunities to demonstrate potential. Overall, because the effects of empowerment may vary in the presence of other factors, researchers need to pay attention to identifying these potential factors.

Further, this stream of research may benefit from additional experimental studies. Experimental studies allow for the manipulation of conditions that are not under researchers' control in survey studies. Further, it allows for a stronger inference of causality because of the inclusion of the control condition. For instance, researchers may adopt experimental studies to examine whether a new socialization program would be effective in enhancing newcomers' psychological empowerment. Experimental studies can also be used to examine complex interaction effects. For instance, a researcher may want to examine whether psychological empowerment may produce the most benefits when the employee is male (vs. female), White (vs. non-White), mentored (vs. non-mentored), and given job feedback (vs. no feedback). These conditions are not easily manipulated in field studies and, therefore, the variance observed may be limited. They are, on the other hand, under control in laboratory experimental settings.

Future research can also examine the cross-cultural differences in psychological empowerment. Organizational behavior researchers increasingly observe that effects that have been found in American culture are not necessarily applicable to other cultures (e.g., Riordan & Vandenberg, 1994). Culture provides an overarching norm guiding people's behaviors (Schein, 1990). For instance, the cultural dimension of individualism-collectivism appears highly relevant to psychological empowerment. Specifically, those in the collectivistic culture may be less willing to accept the authority and take the responsibility for making decisions related to their work because their cultural values predispose them to be cooperative and consulting

(Hofstede, 1997). On the other hand, those employees in an individualistic culture may find the notion of empowerment appealing because it allows them the personal freedom that they value. As another example, those who are in a high power-distance culture may feel less comfortable accepting the authority to make decisions on their own (Hofstede, 1997). On the contrary, those who are in a low power-distance culture may find empowerment less unexpected and awkward, and, therefore, psychological empowerment may have a greater effect on work outcomes.

Psychological empowerment can also be examined in team settings. Teamwork is increasingly adopted by companies (Cohen & Bailey, 1997). It is likely that more and more organizations are interested in empowering their work teams. Weick and Robert's (1993) research suggests that teams often have shared mental models which govern how team members perceive and react to the work environment. Based on this contention, it is also reasonable to believe that the mindset of psychological empowerment may also exist at the team level. Those teams that are psychologically empowered should have team members who collectively believe that teams have the freedom to take responsibility for and have influences over the ideas, decisions, actions, and standard of quality related to their team tasks. It is likely that this team-level psychological empowerment is related to important outcomes such as team performance. In fact, Kirkman and Rosen (1999) found that psychological empowerment defined in terms of Thomas and Velthouse's (1990) definition can be examined at the team level. Further, the construct predicted team outcomes such as productivity, customer service, job satisfaction, organizational commitment, and team commitment. Because a new definition of psychological empowerment has now been provided in this study, the same effort should be exerted towards an examination of the construct at the team level.

Finally, future research should examine the contexts where psychological empowerment may have a negative impact on organizational productivity. Scant attention has been paid to this research question. Because empowerment involves the sharing of power with employees, an inappropriate execution of this power sharing may adversely influence organizations' operations (e.g., Mills & Ungson, 2003). For instance, empowering employees may be seen as a way to further exploit employees because employees have to do more and have more responsibility and yet are compensated the same. Therefore, psychologically empowered employees may indeed have negative feelings towards the management. Moreover, empowering those who enjoy working with coworkers rather than making decisions on their own may de-motivate the psychologically empowered employees. Psychological empowerment may also be a detriment to individuals' productivity if employees are not prepared or well-informed enough to take a more active role at work. They may frequently make mistakes and thus disrupt others' performance as well. Finally, psychological empowerment may sensitize employees and encourage them to pursue or value much independence. This may interfere with the power of management to govern employees and maintain a baseline level of control (Mills & Ungson, 2003).

Conclusion

Employee empowerment has become a global trend. As research on empowerment continues to grow, there is a need to have a more complete understanding of the processes by which empowerment policies and practices affect organizational productivity (Conger & Kanungo, 1988). Researchers agree that the bridge that connects empowerment goals to empowerment outcomes is employees' reactions to empowerment practices and policies (Thomas & Velthouse, 1990). Psychological empowerment, thus, is a promising construct within the organizational sciences for increasing our understanding of employee behavior. This

study re-conceptualizes the construct of psychological empowerment because Thomas and Velthouse's (1990) definition appears conceptually inadequate. Based on the behavioral approach/inhibition theory of power (Keltner et al., 2003), psychological empowerment is re-defined as a psychological state in which individuals are aware that they have the freedom to take responsibility for and have influences over the ideas, decisions, actions, and standard of quality related to their daily job duties. Further, a measurement scale is established that demonstrated acceptable psychometric properties. Finally, the current study also demonstrated that the new version of psychological empowerment is related to important work outcomes such as sense of impact and task motivation. Overall, this study lays some groundwork for future theories of empowerment to build upon.

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APPENDIX

QUESTIONNAIRE

Dear employees,

This research study is conducted by me, Thomas Ng, a doctoral candidate in the Department of Management of the University of Georgia, for my dissertation work "Re-conceptualization of psychological empowerment". All completed surveys will be sent directly to me (in the stamped envelopes provided), and no one in your organization will see any individual surveys. Completion of this survey is entirely voluntary and you can stop taking part at any time without giving any reason, and without penalty. You can ask to have information related to you returned to you, removed from the research records, or destroyed.

The purpose of this study is to examine the experiences of being empowered at work. While this survey does not directly benefit you per se, it helps your organization to have a better understanding of her employees' points of view. In the survey, you will be asked questions (all on 5-point rating scales) about different aspects of your job, organization, and personal beliefs.

No discomforts and stresses are foreseen. Further, no risks are expected. For instance, whether you participate in this survey will not affect your standing in the organization. The results of this participation will be strictly confidential and will not be released in any individually identifiable form, unless otherwise required by law. All record containing individual data related to this project will be kept by me.

I will answer any further questions about this survey and this project, and can be reached at 706-461-9944 (Additional questions or problems regarding your rights as a research participant should be addressed to the Institutional Review Board of University of Georgia at 706-542-3199).

Thank you for your time and cooperation.

Sincerely

Thomas Ng
Doctoral candidate
Principal Investigator
Supervised by Dr. Robert Vandenberg, Department of Management, University of Georgia, phone: 706-542-3720

Please rate the extent to which the following statements correctly describe **your job**.

1 = Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly Agree

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1.	The work I do is very important to me.	1	2	3	4	5
2.	My job activities are personally meaningful to me.	1	2	3	4	5
3.	The work I do is meaningful to me.	1	2	3	4	5
4.	I am confident about my ability to do my job.	1	2	3	4	5
5.	I am self-assured about my capabilities to perform my work activities.	1	2	3	4	5
6.	I have mastered the skills necessary for my job.	1	2	3	4	5
7.	I have significant autonomy in determining how I do my job.	1	2	3	4	5
8.	I can decide on my own how to go about doing my work.	1	2	3	4	5
9.	I have considerable opportunity for independence and freedom in how I do my job.	1	2	3	4	5
10.	My impact on what happens in my department is large.	1	2	3	4	5
11.	I have a great deal of control over what happens in my department.	1	2	3	4	5
12.	I have significant influence over what happens in my department.	1	2	3	4	5
13.	I feel a sense of personal satisfaction when I do my job well.	1	2	3	4	5
14.	My opinion of myself goes down when I do this job badly.	1	2	3	4	5
15.	I take pride in doing my job as well as I can.	1	2	3	4	5
16.	I feel unhappy when my work is not up to my usual standard.	1	2	3	4	5
17.	I like to look back on the day's work with a sense of a job well done.	1	2	3	4	5
18.	I try to think of ways of doing my job effectively.	1	2	3	4	5
19.	My job has variety, that is, it requires me to do many things, using a variety of skills and talents.	1	2	3	4	5
20.	My job requires me to use a number of complex or high-level skills.	1	2	3	4	5
21.	My job is quite simple and repetitive.	1	2	3	4	5
22.	My job is a complete piece of work that has an obvious beginning and end.	1	2	3	4	5
23.	My job is arranged so that I do not have the chance to do an entire piece of work from beginning to end.	1	2	3	4	5
24.	My job provides me the chance to completely finish the pieces of work I begin.	1	2	3	4	5
25.	The results of my work significantly affect the lives or well-being of other people.	1	2	3	4	5
26.	My job is one where a lot of other people can be affected by how well the work gets done.	1	2	3	4	5

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
27.	The job itself is not very significant or important in the broader scheme of things.	1	2	3	4	5
28.	I have autonomy, that is, I am allowed to decide on my own how to go about doing my work.	1	2	3	4	5
29.	My job denies me any chance to use my personal initiative or judgment in carrying out the work.	1	2	3	4	5
30.	My job gives me considerable opportunity for independence and freedom in how I do the work.	1	2	3	4	5
31.	The work itself provides feedback about how well I am doing – aside from any feedback coworkers or supervisors provide.	1	2	3	4	5
32.	Just doing the work required by my job provides many chances for me to figure out how well I am doing.	1	2	3	4	5
33.	The job itself provides very few clues about whether or not I am performing well.	1	2	3	4	5
34.	I am satisfied with my job in general.	1	2	3	4	5
35.	It is likely that I will leave the organization in the next 12 months.	1	2	3	4	5
36.	I feel that I have been adequately trained to perform the basic functions of my job.	1	2	3	4	5
37.	I feel that my job plays a significant role in accomplishing company goals.	1	2	3	4	5
38.	Though it has its challenges, I enjoy my job and the people in my department.	1	2	3	4	5

Please rate the extent to which the following statements correctly describe **your personal beliefs**.

1 = Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly Agree

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
39.	Whether or not I get to be a leader depends mostly on my ability.	1	2	3	4	5
40.	When I make plans, I am certain to make them work.	1	2	3	4	5
41.	I can pretty much determine what will happen in my life.	1	2	3	4	5
42.	I am usually able to protect my personal interests.	1	2	3	4	5
43.	When I get what I want, it is usually because I worked hard for it.	1	2	3	4	5
44.	My life is determined by my own actions.	1	2	3	4	5
45.	On the whole, I am satisfied with myself.	1	2	3	4	5

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
46.	At times, I think I am no good at all.	1	2	3	4	5
47.	I feel that I have a number of good qualities.	1	2	3	4	5
48.	I am able to do things as well as most other people.	1	2	3	4	5
49.	I feel that I do not have much to be proud of.	1	2	3	4	5
50.	I certainly feel useless at times.	1	2	3	4	5
51.	I feel that I am a person of worth, at least on an equal plane with others.	1	2	3	4	5
52.	I wish I could have more respect for myself.	1	2	3	4	5
53.	All in all, I am inclined to feel that I am a failure.	1	2	3	4	5
54.	I take positive attitude toward myself.	1	2	3	4	5
55.	In my work assignments, I try to be my own boss.	1	2	3	4	5
56.	I go my own way at work, regardless of the opinions of others.	1	2	3	4	5
57.	I disregard rules and regulations that hamper my personal freedom.	1	2	3	4	5
58.	I consider myself a “team player” at work.	1	2	3	4	5
59.	I try my best to work alone on a job.	1	2	3	4	5
60.	I am always courteous even to people who are disagreeable.	1	2	3	4	5
61.	There have been occasions when I took advantage of someone.	1	2	3	4	5
62.	I sometimes try to get even rather than forgive and forget.	1	2	3	4	5
63.	I sometimes feel resentful when I don’t get my way.	1	2	3	4	5
64.	No matter who I’m talking to, I’m always a good listener.	1	2	3	4	5

Please rate the extent to which the following statements correctly describe **<u>your organization</u>**.

1 = Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly Agree

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
65.	Employees are provided with financial records of the company.	1	2	3	4	5
66.	The company has an efficient way to disseminate information to all levels of employees.	1	2	3	4	5
67.	Employees have access to the information in their personal work-files.	1	2	3	4	5
68.	The company publishes information on the company’s reward structure.	1	2	3	4	5
69.	The company provides employees with information on company clients.	1	2	3	4	5

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
70.	My performance evaluations within the past few years have been helpful to me in my professional development.	1	2	3	4	5
71.	There is a strong link between how well I perform my job and the likelihood of my receiving recognition and praise.	1	2	3	4	5
72.	There is a strong link between how well I perform my job and the likelihood of my receiving a raise in pay/salary.	1	2	3	4	5
73.	There is a strong link between how well I perform my job and the likelihood of my receiving high performance appraisal ratings.	1	2	3	4	5
74.	Generally, I feel this company rewards employees who make an extra effort.	1	2	3	4	5
75.	I am satisfied with the amount of recognition I receive when I do a good job.	1	2	3	4	5
76.	If I perform my job well, I am likely to be promoted.	1	2	3	4	5
77.	I am motivated to do a good job because it will be noticed by members of management.	1	2	3	4	5
78.	I feel that I'm held accountable for my performance.	1	2	3	4	5
79.	I feel that my ideas and suggestions are valued by my superiors.	1	2	3	4	5

Please rate the extent to which the following statements correctly describe **your day-to-day work experiences**.

1 = Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly Agree

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
80.	When I encounter a minor work problem, I feel comfortable solving it myself.	1	2	3	4	5
81.	If I see a better way to do something, I don't hesitate to do it that way.	1	2	3	4	5
82.	I expect to set my own pace to accomplish my tasks.	1	2	3	4	5
83.	I think the best way to accomplish my job is to simply follow the procedures.	1	2	3	4	5
84.	When I arrive at work on a given day, I expect the goals that I need to fulfill are outlined for me.	1	2	3	4	5
85.	When discussing a new idea with my supervisor, I don't hesitate to point out any potential problems with the ideas.	1	2	3	4	5

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
86.	I expect to simply listen to my supervisor during meetings and not say much at all.	1	2	3	4	5
87.	I evaluate my work against my own standards of quality.	1	2	3	4	5
88.	It is not my place at work to question the standards that we are expected to meet.	1	2	3	4	5
89.	When I am approached by management regarding some aspect of my job, I am viewed as the expert.	1	2	3	4	5
90.	I am willing to risk small mistakes at work because I trust that there will be no serious consequences from them.	1	2	3	4	5
91.	The standard of quality I set for my work is the one that matters the most to me.	1	2	3	4	5
92.	As far as I see it, my day-to-day work tasks are largely determined by management.	1	2	3	4	5
93.	I make decisions about my work without fear of being punished for small mistakes.	1	2	3	4	5
94.	I accept responsibility for the consequences of my decisions at work.	1	2	3	4	5
95.	I prefer to consult with coworkers first before I do anything that differs from what is expected.	1	2	3	4	5
96.	I expect to set challenging performance goals for myself.	1	2	3	4	5
97.	I am exposed to high levels of noise at work.	1	2	3	4	5
98.	Some of the important achievements in life include acquiring material possessions.	1	2	3	4	5
99.	I want an international career which would be a series of foreign assignments.	1	2	3	4	5
100.	I don't find anything wrong or reprehensible about workplace romance.	1	2	3	4	5
101.	I have a poor appetite.	1	2	3	4	5
102.	I can influence the way work is done in my department.	1	2	3	4	5
103.	I can influence decisions taken in my department.	1	2	3	4	5
104.	I have the authority to make decisions at work.	1	2	3	4	5
105.	I am less motivated to do a good job because I see others "getting away with it".	1	2	3	4	5
106.	I feel that I get valuable feedback about my work performance from my supervisor.	1	2	3	4	5
107.	If I have a problem at work, I feel my supervisor will listen to my concerns and promptly address them.	1	2	3	4	5
108.	Though we may not agree on everything, I feel that my supervisor generally treats me with the respect that I deserve.	1	2	3	4	5

Please rate the extent to which the following statements correctly describe **your job performance**.

1 = Needs Much Improvement 2= Needs Some Improvement 3 = Satisfactory 4 = Good 5= Excellent

		Needs Much Improvement	Needs Some Improvement	Satisfactory	Good	Excellent
109.	How would you rate your own work performance?	1	2	3	4	5
110.	How would your employer probably rate your work performance?	1	2	3	4	5

Demographics:

111. Gender: _____Male _____Female

112. Age _____years old

113. What is your education level?
   a. Some high school
   b. High school diploma or equivalent
   c. Some college of community college
   d. Associate degree, vocational/technical degree, or community college degree
   e. Bachelor's degree
   f. Advanced degree (e.g., M.B.A., Ph.D.)

114. What category best describes your race/ethnic origin?
   a. Caucasian
   b. African-American
   c. Hispanic
   d. Asian or Pacific Islander
   e. Native American
   f. Other

115. What is your job level?
   a. Employee
   b. Manager
   c. Senior manager

116. How long have you worked in your present job? _____Years _____Months

117. How long have you worked with the current employer? _____Years _____Months

118. What is your job title? _____

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