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Empowerment of non-academic personnel in higher education: exploring associations with perceived organizational support for innovation and organizational trust

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EMPOWERMENT OF NON-ACADEMIC PERSONNEL IN HIGHER EDUCATION: EXPLORING ASSOCIATIONS WITH PERCEIVED ORGANIZATIONAL SUPPORT FOR INNOVATION AND ORGANIZATIONAL TRUST

by

Wing Keung Jason Lau

An Abstract

Of a thesis submitted in partial fulfillment of the requirements
for the Doctor of Philosophy degree in
Educational Policy and Leadership Studies (Higher Education)
in the Graduate College of The University of Iowa

December 2010

Thesis Supervisors: Professor Lelia B. Helms
Professor Alan B. Henkin

ABSTRACT

Employee empowerment has long been associated with organizational outcomes such as innovation, greater effectiveness, and better performance. Non-academic professional employees in higher education are responsible for the important day-to-day operations of a university; therefore, organizational strategies such as employee empowerment that encourage initiatives and innovative behaviors among them may become crucial to the long-term survival of today's colleges and universities. Surprisingly, non-academic professional employees in higher education have received little attention in the scholarly literature.

The purpose of this study was to investigate the relationships between the levels of empowerment and perceived organizational support for innovations and organizational trust among non-academic professional employees within a public comprehensive university in a Midwestern state. The study also tested the hypotheses that organizational trust may affect perceived employee empowerment and influence the relationship between perceived organizational support for innovation and employee empowerment. A survey instrument was distributed by email to all eligible professional and scientific employees ($N = 558$) in the selected university. Data were collected using a web survey method. A total of 255 completed instruments were returned, which yielded a 45.7% net response rate.

Overall, there was substantial evidence supporting a relationship between empowerment and the four distinct cognitions of empowerment, supporting the notion that empowerment is the "gestalt" of the four dimensions. Perceived organizational support for innovation was a significant predictor of employees' perceived empowerment among non-academic professional employees. The respondents who reported higher levels of perceived organizational support for innovation perceived higher levels of empowerment. The study's findings indicated the influence of organizational trust on empowerment. The findings also showed that administrative responsibilities had a

positive direct effect on organizational support for innovation and a positive indirect effect on empowerment.

Knowing that the success of empowerment initiatives may depend on the extent to which organizational members feel valued and affirmed, which requires an organizational climate that they perceive as supportive of innovation, change, and risk-taking behaviors, administrators in higher education can maximize their organizational strategies by acquiring internal mechanisms that can stimulate and encourage new ideas for innovation proposal, adoption, and implementation to occur.

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CERTIFICATE OF APPROVAL

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PH.D. THESIS

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To

My father Yui-Wa Lau, and my mother Po-Siu Ho, who passed away before the completion of this dedicated work. Even though you are no longer with me, I can see the smiles on your faces and I know you are watching over me. You are my role models and your personal integrity and hard work are the inspirations of this dissertation.

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Dr. Christopher R. Edginton

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models and allowing me the freedom to pursue my dreams. I love you both and will be forever indebted to you.

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CHAPTER I

INTRODUCTION

Change is inevitable: "Nothing stays the same" (Seymour, 1988, p. 1). Even the most stable organizations change over time (Aiken & Hage, 1971). In today's rapidly changing environment, both private and public organizations are faced with increased social and economic change and competition that make continuous renewal and adaptation crucial (Mathisen & Einarsen, 2004). Hence, the success of an organization may well depend on its capacity to manage and adapt to environmental changes (Baker, 2000). Organizational strategies that encourage commitment and risk-taking and promote creativity and innovation within and among employees have been increasingly recognized as key factors in long-term organizational survival (Kanter, 1983; Mathisen & Einarsen, 2004).

Colleges and universities do not operate in a vacuum; thus, they are not immune from today's challenges and future demands. In fact, crisis and change in higher education have been characterized as "the rule, not the exception" (Kerr & Gade, 1987, p. 129). Therefore, it is imperative for institutions of higher education to manage change effectively. Change is inevitable but it is also manageable and controllable (Seymour, 1988). Innovation, therefore, is vital to colleges and universities as they continue to struggle to be responsive and flexible in today's competitive environment (Spreitzer, 1995).

Zusman (2005) stated that the 21st century has brought with it profound challenges to the nature, values, and control of higher education in the United States. Societal expectations and public resources for higher education have been undergoing fundamental shifts. Declining state funding and federal support, increasing privatization of public colleges and universities, and increasing demands for institutional accountability are some of the many challenges that higher education faces today (Zusman, 2005). The ongoing changes in public attitudes toward higher education will

likely result in continued shrinking of and unpredictable state support for higher education. Reduced private giving and declining endowment income compound the problems and further limit institutional ability to secure financial support from private sources. As demand for college continues to grow in the next decade, institutions of higher education must search for innovative ways to meet the increasing needs of their constituents.

Employee Empowerment

Employee empowerment has long been associated with organizational outcomes such as innovation, greater effectiveness, and better performance (Kanter, 1977; Lawler, 1986; Petter, Byrens, Choi, Fegan, & Miller, 2002). Organizational competitiveness is associated with positive work behaviors adopted by employees who are empowered (Chan, Taylor, & Markham, 2008). Employee empowerment has become a popular management strategy in today's management reforms and a trend in both public and private organizations (Pitts, 2005). The concept of empowerment has become a topic of interest among organizational theory researchers and practitioners (Conger & Kanungo, 1988). In recent years, more than 70% of organizations have adopted some kind of empowerment initiative in their workforces (Spreitzer, 2006; Spreitzer & Doneson, 2008). Many believe that organizations can be shaped to enhance the empowerment of members (Matthews, Diaz, & Cole, 2002; Peterson & Speer, 2000). Potential benefits of employee empowerment identified in the literature include stronger task commitment, higher levels of initiative in carrying out role responsibilities, more innovation and learning, higher job satisfaction, and stronger organizational commitment predictive of lower levels of turnover (Spreitzer, 1995; Thomas & Velthouse, 1990).

Innovation

Orpen (1990) argued that organizations that value innovation and creativity among their members are more vigilant in turbulent environments. Damanpour (1987) suggested that "innovation introduces change into the outputs, structure, or processes of

an organization" (p. 676). Innovative environments allow organizations to maximize the potential of their employees, which is especially vital when physical and financial resources are scarce and external environments are challenging and competitive (Axtell, Holman, Unsworth, Wall, & Waterson, 2000). Studies have shown that employees working in innovative organizational environments demonstrate a higher level of job satisfaction, motivation, activity, and organizational commitment; they are also more excited about the importance of their work and willing to take risks needed for change (Dee, Henkin, & Pell, 2002; Jansen & Chandler, 1994; Orpen, 1990; Pierce & Delbecq, 1977; Tesluk, Farr, & Klein, 1997).

Despite increasing interest in the topic of innovation by management and organizational theory scholars, limited theoretical and empirical work is available to further our understanding of innovation in work groups (Agrell & Gustafson, 1996; Anderson, De Dreu, & Nijstad, 2004; Anderson & West, 1998; Bunce & West, 1995). According to Bunce and West (1995),"One of the least understood but practically and theoretically important aspects of human behavior at work is the tendency of individuals to engage in innovation in order to introduce new and improved ways of doing things in the workplace" (p. 199).

Organizational Climate

Organizational climate has long been recognized as a source of influence on an individual's behavior and may affect an organization's ability to change. Organizational climate exerts powerful influences on the ways in which organizational members perceive their work environment (Putten et al., 1997). The success of institutional change efforts may well depend on the extent to which organizational members perceive their organizational climate as supportive of innovation, change, and risk-taking behaviors (Basadur, 1995; Siegel & Kaemmerer, 1978). The concept of organizational climate, therefore, may provide organizational members with an understanding of the meaning of

their organization and their internal work environment and is crucial to understanding the various influences on employee performance (Putten et al., 1997).

Non-Academic Employees in Higher Education

This study is primarily concerned with the perceived levels of empowerment among non-academic professional employees in higher education. According to the U.S. Department of Education's report on employees in postsecondary institutions (Knapp, Kelly-Reid, Ginder, & National Center for Education, 2009), non-academic professional employees are hired for the primary purpose of performing academic support, student service, and institutional support. Their assignments, in most instances, would require either training in specialized areas and that they hold appropriate academic degree(s) or possess equivalent experience.

Non-academic professional staff members are key components in today's higher education settings. They are responsible for the day-to-day operations of a university (Smerek & Peterson, 2007). In Liebmann's (1986) study of non-academic employees in higher education, he found that non-academic employees outnumbered faculty members nationally and "could be considered chiefly responsible for the successful daily operation of every institution of higher learning" (p. 4). Because of the bureaucratic nature of higher education, Liebmann (1986) pointed out that higher education management will always require large numbers of professional staff to maintain functioning.

Higher education is an "enterprise of human beings" (Liebmann, 1986, p. 14) where technology and service delivery are primarily driven by human resources (Jensen, 2006). Thus, an innovative organizational climate that maximizes the potential of its members may be a viable option for an enhanced work environment where employees feel empowered to experiment with new ideas (Siegel & Kaemmerer, 1978) and, ultimately, may become important to the long-term survival of colleges and universities in today's increasingly competitive environment (Jensen, 2006; Scott & Bruce, 1994).

Purpose of the Study

The purpose of this study is to conduct an exploratory investigation of employee empowerment among non-academic professional employees within a public comprehensive university in a Midwestern state. The successful operation of a university appears to require high levels of empowerment, trust, and perceived support for innovation from employees (Chan, Taylor, & Markham, 2008; Liebmann, 1986; McKnight & Chervany, 1996). Employees' feelings of empowerment may be affected by employees' perceptions of organizational support for innovation and organizational trust. To investigate relationships among empowerment, organizational support for innovation, and organizational trust, the researcher will (a) review the relevant literature on each of the three key variables: empowerment, support for innovation, and trust; (b) establish core conceptualizations of empowerment; (c) highlight research on empowerment, support for innovation, and trust that is specific to higher education; (d) develop a model of employee empowerment by drawing on constructs and concepts from existing theoretical research bases; (e) assess the relationships between empowerment constructs and organizational support for innovation and organizational trust among non-academic professional employees in higher education; and (f) identify moderating effects of these relationships for individuals within the university.

Theoretical Framework and Conceptual Model

Employee empowerment has long been associated with organizational outcomes such as innovation, greater effectiveness, and better performance (Kanter, 1977; Lawler, 1986; Petter et al., 2002). As empowered employees gain more discretion over how their jobs are performed, their levels of self-efficacy increase because they decide the best way to perform a given task (Gist & Mitchell, 1992). Empowered employees, thus, are likely to be more adaptive because of the increased flexibility that accompanies empowerment (Scott & Bruce, 1994), enabling organizations to be more flexible and responsive (Bowen & Lawler, 1992; Conger & Kanungo, 1988).

Non-academic professional staff members are key components in today's higher education settings. Because they are responsible for the important day-to-day operations of a university, organizational strategies such as employee empowerment that encourage initiatives and innovative behaviors among employees may become crucial to the long-term survival of colleges and universities in today's increasingly competitive environment (Jensen, 2006; Kanter, 1983; Mathisen & Einarsen, 2004; Scott & Bruce, 1994).

Innovation in higher education, however, is difficult. Colleges and universities have been described as fragmented, divisive organizations (Seymour, 1988). This very nature of institutions of higher education makes change difficult because of the lack of connection between people and the increase in complexity and fragmentation. In addition, these various fragmented units are in active competition with one another for status, power, and resources that may impact empowerment initiatives (Seymour, 1988).

Recognizing both the need for and the challenges of employee empowerment in higher education settings, and the support in research for organizational support and trust as correlates of perceptions of empowerment, the investigator will develop a research model based on asserted associations (see Figure I-1) to study the relationships among employee empowerment, organizational support for innovation, and organizational trust.

Empowered employees feel in control and perceive that they are capable of shaping their work role and context (Spreitzer, 2007). Consequently, employees with increased self-efficacy are likely to be innovative in their work and to expect success (Amabile, 1988; Redmond, Mumford, & Teach, 1993). The related literature on institutions of higher education suggests several requisites for employee empowerment:

- intrinsically motivated employees who are willing to engage in innovative acts and take initiatives without the anticipation of direct reward or personal recognition;

- an organizational climate that employees perceive as supportive of innovation, change, and risk-taking behaviors;
- opportunities for sociopolitical support, access to resources, and access to information;
- employees' faith in the impact that their efforts have on the overall goal attainment;
- structural safeguards characterized by high levels of organizational trust in which inevitable failures of experimentation are tolerated without the fear of negative outcomes.

Research Questions

The following questions frame this research. These questions will be subsequently rephrased as hypotheses in the next section using terminology related to model specification and testing.

Research Question 1: Will an analysis of empowerment among employees yield four cognitions of empowerment: meaning, competence, self-determination, and impact?

Research Question 2: Will higher levels of perceived organizational support for innovation be positively associated with empowerment?

Research Question 3: Will higher levels of organizational trust be positively associated with empowerment?

Research Question 4: Will higher levels of organizational trust be positively associated with perceived organizational support for innovation?

Research Question 5: Will the relationship between employee's perceptions of empowerment and perceived organizational support be affected by organizational trust?

Research Question 6: Will the relationship between employee's perceptions of empowerment and perceived organizational support be affected by the demographic variables of age, gender, level of education, work division, years in the current university, years of professional experience, and administrative experience.

Hypotheses in the Model

Empowerment refers to the individual beliefs of employees about their role in relation to the organization (Bandura, 1989; Spreitzer, 1995). At the individual level of analysis, empowerment is characterized as an enabling rather than a delegating process (Conger & Kanungo, 1988). Empowerment, thus, is not something managers do to their employees. Employees are empowered only when they perceive themselves to be so (Mishra & Spreitzer, 1998; Quinn & Spreitzer, 1997; Spreitzer, 1995, 1997). It has been conceptualized that when employees feel empowered at work, they experience four dimensions: (a) a fit between the needs of their work role and their beliefs, values, and behaviors; (b) a sense of belief in their capacity to perform activities with skill; (c) the feeling of having control over their work; and (d) the belief that they have significant influence over strategic, administrative, or operational outcomes at work (Spreitzer, 1995). Consequently, the following hypothesis is proposed:

Hypothesis 1: An analysis of empowerment among employees will yield four cognitions of empowerment: meaning, competence, self-determination, and impact.

Empowerment is recognized as an essential factor in managerial and organizational effectiveness by both organizational theory researchers and leadership and management practitioners (Bennis & Nanus, 1985; Conger & Kanungo, 1988; Spreitzer, 1995). The success of empowerment initiatives may depend on the extent to which organizational members feel valued and affirmed (Spreitzer, 2007), which in turn requires an organizational climate that they perceive as supportive of innovation, change, and risk-taking behaviors (Siegel & Kaemmerer, 1978).

Innovation is defined in this study as adoption of an internally generated or purchased device, system, policy, program, process, product, or service that is new to the adopting organization (Damanpour, 1991). It is important to note that this present study does not incorporate a measure of the number of innovations adopted by an organization. This is because output may not be a significant factor in terms of the success of

organizational change. Instead, this study focuses on the employees' overall perceptions of support for innovation in their work environment.

Organizational climate is defined as the current, common patterns of important dimensions of organizational life such as organizational policies, practices, and procedures (Kopelman, Brief, & Guzzo, 1990) or its members' perceptions of and attitudes toward them (Peterson & White, 1992). Such work environments provide employees with the support needed for them to act on their perception of meaning, self-determination, competency, and impact, the four basic motivational constructs suggested by Spreitzer (1995).

Employee empowerment results from the internalization of a framework that is grounded in personal meaning and is responsive to the larger aims of the organization. Research has suggested that employees experience more empowerment in supportive organizational environments (Spreitzer, 2007). A study by Seibert, Silver, and Randolph (2004) confirmed that psychological empowerment is positively related to a climate of empowerment. Spreitzer (1996) also suggested that sociopolitical support, access to information, and access to resources are related to psychological empowerment.

Dimensions of empowerment appear to have reciprocal relationships with the concept of organizational support for innovation. Employees' perceived levels of organizational support for innovation may be significantly related to their feelings of empowerment. The following hypothesis is proposed:

Hypothesis 2: Higher levels of perceived organizational support for innovation will be positively associated with empowerment.

Empowered employees feel in control and perceive that they are capable of shaping their work role and context. The need for empowerment, however, makes people vulnerable to their organizations (Culbert & McDonough, 1986). For employees to feel empowered, they need to be confident that management values their contributions (Culbert & Mcdonough, 1986) and that they will not suffer negative consequences when

exercised initiatives do not work out as anticipated (Chan, 2003). In other words, employee empowerment is based on a foundation of trust. Without such evidence, employees may find it difficult to internalize a stable definition of the system that is both personally and organizationally empowering (Culbert & McDonough, 1986).

Research on empowerment has been associated with organizational trust (Faulkner & Laschinger, 2008). Chan et al. (2008) recognized the important role of trust in ensuring the success of the empowerment process in which empowerment and trust are intertwined. Research suggests that trust is important for individuals to experience empowerment at work; trust must first be nurtured so that employees will have no fear of experimenting with new ways of doing things (Chan et al., 2008). Spreitzer (2007) argued that employees experience more empowerment when they perceive that their leaders are trustworthy. The following hypothesis is proposed:

Hypothesis 3: Higher levels of organizational trust will be positively associated with empowerment.

Trust is recognized as an important factor in support for innovation because innovation itself involves risk taking and depends on a high trust environment (Arad, Hanson, & Schneider, 1997; Henkin & Davis, 1991; Hoy & Kupersmith, 1984; Mathisen & Einarsen, 2004; Siegel & Kammerer, 1978). Although organizational support for innovation encourages creativity and initiative among employees (Burningham & West, 1995; Seibert et al., 2004), employees must feel safe and supported in their work environments if they are to engage in high-risk activities (Fedor, 1996).

Employees should be given the freedom to take initiative for innovation while knowing that any inevitable failures of experimentation are tolerated and viewed as learning experiences (Arad et al., 1997; Mathisen & Einarsen, 2004; Siegel & Kaemmerer, 1978). Without trust, employees may be less likely to take risks and more likely to demand greater protections against the possibility of betrayal to defend their own interests (Tyler & Kramer, 1996).

Research has found that organizational trust is related to perceived support for the organization (Tan & Tan, 2000). Supportive climates are characterized by high levels of trust (Anderson & West, 1998; Mathisen & Einarsen, 2004). Organizational trust, thus, is likely to enhance employees' feelings of support for innovation. The following hypothesis is proposed:

Hypothesis 4: Higher levels of organizational trust will be positively associated with perceived organizational support for innovation.

Although supportive organizational environments may be linked to employees' experienced empowerment, empowerment is "about risk taking. . . [about] trusting people" (Quinn & Spreitzer, 1997, p. 38). A climate of trust is an essential element of empowerment. Without trust, employees will be unwilling to engage in high-risk activities (Fedor, 1996).

In the fragmented, decentralized systems of work environment in higher education, where frequent direct observation of personnel is generally impractical and is coupled with limited connections between coworkers, the trust factor may become even more important.

Trust matters for empowerment. Employees act in anticipation of a successful future endeavor to the extent to which necessary impersonal structures are in place (McKnight, Cummings, & Chervany, 1998). Organizational trust provides structural safeguards, including regulations, guarantees, and legal recourse to individuals in the organization (Shapiro, 1987). Employees' feeling of psychological empowerment is affected by perceptions of a supportive work climate that is characterized by trust (Corsun & Enz, 1999). Organizational trust may reduce defensive postures among employees inherent in any significant organizational change effort, thus resulting in increased perceptions of empowerment (Spreitzer, Noble, Mishra, & Cooke, 1999). If managers create work environments that enhance feelings of organizational trust,

employees are more likely to perceive high levels of empowerment (McKnight & Chervany, 1996). Therefore, the following hypothesis is proposed:

Hypothesis 5: The relationship between employee's perceptions of empowerment and perceived organizational support will be affected by organizational trust.

The following variables are used as controls in this study: age, gender, level of education, work division, years in the current university, years of professional experience, and administrative experience. The related literature suggests associations between these variables and empowerment, support for innovation, and/or organizational trust.

Demographics influence empowerment in a number of studies. Researchers find enhanced empowerment related to older workers (Baker, 2000; Spreitzer 1992), males (Koberg, Boss, Senjem, & Goodman, 1999; Spreitzer 1992; Vardi, 2000), increased years of education (Baker, 2000; Havens & Mills, 1992; Koberg et al., 1999; Spreitzer, 1992), and tenure (Baker, 2000; Koberg et al., 1999).

Spreitzer (1996) argued that gender, age, and education should be controlled given their possible relationship to empowerment. Age may influence empowerment because older employees may perceive themselves as having risen as far as they can in the organization (Ettington, 1992). Although Itzhaky and York (2000) found that gender did not have an impact on empowerment and other research has shown only small differences between men and women (Bayes, 1991; Daley & Naff, 1998; Guy, 1993), substantial research suggests that women are more likely to empower employees than are men. Yoder and Kahn (1992) suggested that women seek to be empowered, whereas men seek specifically to have power over others. In this respect, men may be more inclined than women to define and express power as a form of control over their environment (Boudrias, Gaudreau, & Lashinger, 2004). Kanter (1977) suggested that women have lower feelings of empowerment in many organizations because they are traditionally overrepresented at the lower levels of the organizations where they do not hold important or powerful positions (Chan, 2003).

Education and tenure should be controlled because Spreitzer (1996) suggests that highly educated employees may experience greater empowerment as they feel more competent within the organization. Employees with more tenure also reported stronger feelings of empowerment, particularly competence, meaningfulness, and impact at work (Koberg et al., 1999; Spreitzer, 1995). Siegel and Kaemmerer (1978) suggested that different units within an organization may be compared to each other in terms of degree of perceived level of psychological empowerment. It has also been suggested that group and organizational variables may have an influence on the perceived empowerment of members (Peterson & Speer, 2000).

Demographics also may influence perceived organizational support for innovation. Dee (1999) argued that perceived support for innovation may vary in terms of age, gender, and educational level of organizational members. Personal experiences and backgrounds may affect perceptions of work environments. Moye (2003) suggested that individuals who have higher levels of education may have higher expectations that the organization has difficulty satisfying. Similarly, Young (1993) found that older employees perceived less support for diverse thinking than younger employees. Henkin and Davis (1991) also found that older employees employed in a large electronics corporation perceived lower levels of support for innovation. In contrast, Henkin et al., (1993) found that older faculty members perceived higher levels of support for innovation in a sample of nursing department faculty.

Employee empowerment enables an organization to share decision making at lower levels of the organization by providing employees access to authority, information, resources, and support across all levels, and the opportunity to learn and develop (Kanter, 1977; Lawler, 1986; Liden, Wayne, & Sparrowe, 2000). Gibb (1965) also pointed to trust as prevalent in a work environment where employees' opinions are often solicited. Therefore, employees' experience in administrative responsibilities is included.

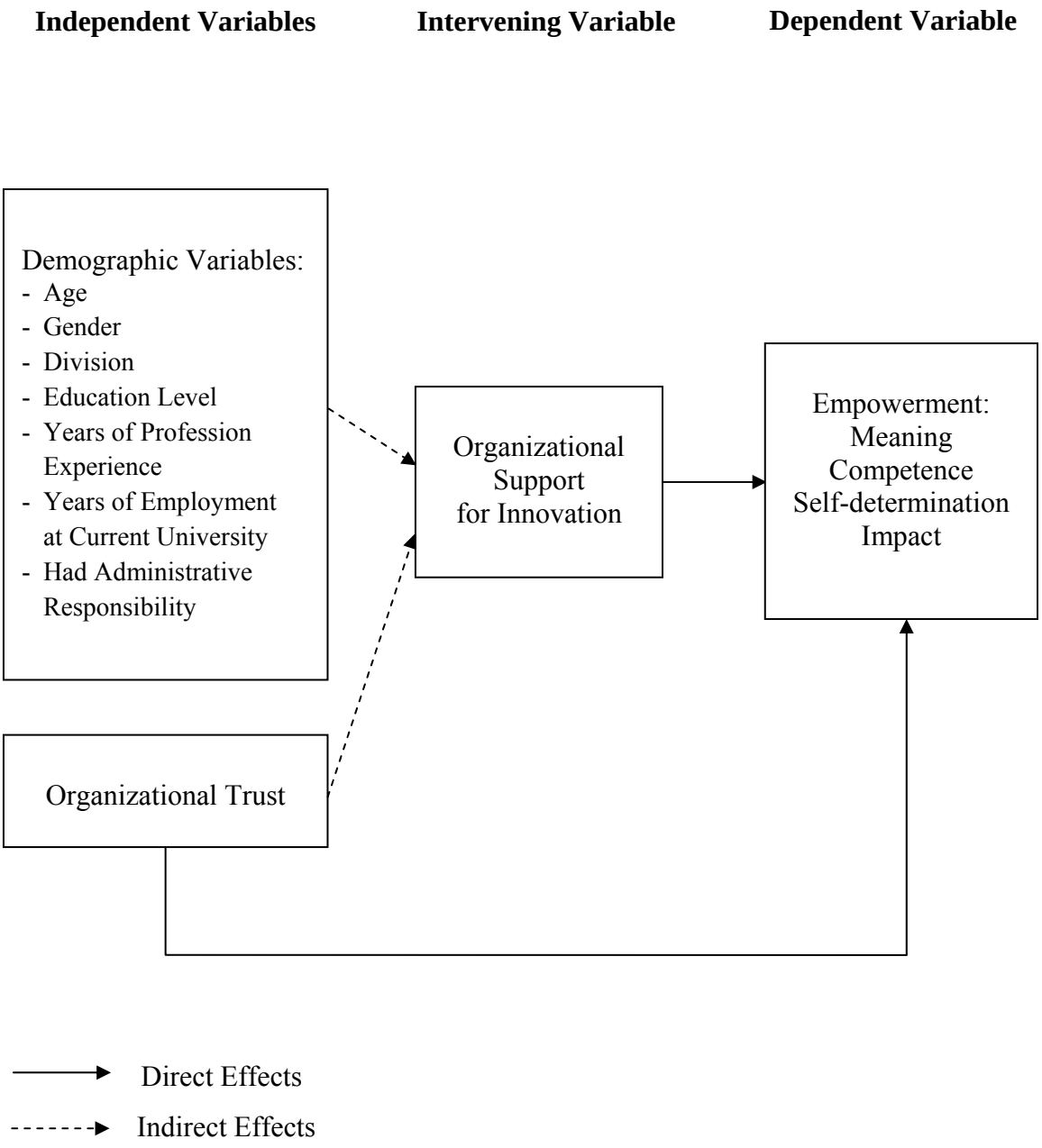
Hypothesis 6: The relationship between employee's perceptions of empowerment and perceived organizational support will be affected by the demographic variables of age, gender, level of education, work division, years in the current university, years of professional experience, and administrative experience.

The conceptual framework for this study focuses on non-academic professional employees' perceptions of empowerment. This study is designed to investigate whether employees' perceptions of organizational support for innovation in a higher education work setting are associated with the levels of perceived employee empowerment. Employee empowerment among non-academic professional employees is the dependent variable. Organizational support for innovation is the intervening variable. The control variables of organization trust and demographic information from the related literature are also included in the study (see Figure I-1).

Significance of the Study

Limited research to date has examined the empirical relationship among employees' perceptions of support for innovation, organizational trust, and structural and psychological empowerment. Research studies that specifically examine the relationship between organizational support for innovation and employee empowerment have been limited (Gomez & Rosen, 2001; Oreg, 2006). Researchers have suggested that future investigations should focus on the relationship between organizational characteristics and empowerment so that organizations can be shaped effectively to enhance members' empowerment (Peterson & Speer, 2000). In addition, more research is needed to expand and validate empowerment as a concept that gives us further insight into behavior in organizations (Koberg et al., 1999).

Figure I-1. Conceptual Model of Relationships between Empowerment, Perceived Organizational Support for Innovation, and Organizational Trust



There has been minimal research on non-academic professional staff in higher education. Non-academic professional staff are responsible for the day-to-day operations of a university (Smerek & Peterson, 2007). In Liebmann's (1986) study of non-academic employees in higher education, he found that non-academic employees outnumbered faculty members nationally and "could be considered chiefly responsible for the successful daily operation of every institution of higher learning" (p. 4). Because of the bureaucratic nature of higher education, Liebmann (1986) pointed out that higher education management will always require large numbers of professional staff to maintain functioning. Given that non-academic professional staff members are recognized as key components of today's higher education, it is surprising that there is limited scholarly research on empowerment focusing on non-academic professional employees in colleges and universities. Although several studies have found important differences between administrator and faculty perceptions of their institutions (Austin & Gamson, 1983; Bowen & Schuster, 1986; Peterson & White, 1992), non-academic professional employees in higher education have received little attention in the scholarly literature. The current study may expand the knowledge base regarding empowerment as it relates to non-academic professional staff in higher education.

Although the concept of empowerment in the workplace has become a topic of interest among organizational theory researchers and practitioners (Conger & Kanungo, 1988), this relatively large body of research has neglected to ask and explain why efforts in empowering employees often fall short of expectations or fail altogether (Gomez & Rosen, 2001; Oreg, 2006). It is critical to understand what factors facilitate and inhibit employee empowerment. Putten et al. (1997) suggested that personal and organizational dimensions can significantly influence how individuals perceive their work environment. Age, gender, level of education, work unit/division, position, years of professional experience, and years at their institution are personal or individual characteristics that may be important. Organizational variables include perceived organizational support that

can influence and shape the ways in which individuals perceive their work environment. The present study may enhance our understanding of what influences employees' perceptions of an innovative organizational climate and practitioners' and managers' awareness of empowerment as an effective and beneficial management tool.

Definitions of Terms

The following major terms are defined for the purpose of clarity and consistency in this study.

Employee empowerment is a multifaceted, motivational construct manifested in four cognitions: meaning, competence, self-determination, and impact (Spreitzer, 1995; Thomas & Velthouse, 1990). Collectively, these four cognitions reflect employees' active orientation to their work and how they feel about their work role and context. In addition, empowerment is defined as a continuous variable in which employees can feel different degrees of empowerment (Spreitzer, 1995).

Structural empowerment is defined as the delegation of decision-making prerogatives from the formal structure to the employees with the discretion to act on their own (Mills & Ungson, 2003).

Psychological empowerment is defined as individual experiences of intrinsic motivation based on cognitions about a person's relation to work roles (Spreitzer, 1995).

Non-academic professional employees are hired for the primary purpose of performing academic support, student service, and institutional support. Their assignments, in most instances, would require either a baccalaureate degree or higher or experience of such kind and amount as to provide a comparable background (Knapp et al., 2009).

Organizational trust refers to an employee's faith in corporate goal attainment and organizational leaders as a whole and to the belief that, ultimately, organizational action will prove beneficial for employees. It is also the belief that organizational leaders will be straightforward and will follow through on commitments (Gilbert & Tang, 1998).

Innovation is defined as the introduction and adoption of an internally generated idea, behavior, or process that is new to the adopting organization (Damanpour, 1991).

Organizational climate refers to a set of measurable properties of the work environment that are perceived by those working in the environment and influence their motivation and behavior (Siegel & Kaemmerer, 1978).

Organizational support for innovation refers to the extent to which organizations facilitate the generation and use of new ideas among their members (Siegel & Kaemmerer, 1978).

Non-academic professional staff refers to staff employed for the primary purpose of performing academic support, student service, and institutional support, whose assignments would require either a baccalaureate degree or higher or experience of such kind and amount as to provide a comparable background (Knapp, Kelly-Reid, Ginder, & Miller, 2008)

Limitations of the Study

There are several possible limitations in this study. The first limitation relates to the instrument. The instrument is presented in a descriptive web survey, asking participants for their perceptions. The measurement requests information about individuals' perceptions and depends on participants' interpretations. Self-reports of work perceptions do not necessarily provide objective data, in contrast with data derived from organizational records (Price & Mueller, 1986). Survey research methods, however, enable the collection of a broad array of data from a large number of respondents. Self-reports, moreover, may be appropriate for use in socially constructed work environments in which employee attitudes, values, and perceptions condition interpretations of organizational reality.

Another limitation involves a general characteristic of voluntary, self-report surveys. Employees who have low levels of trust in an institution, for example, may be less inclined to participate in this kind of study. Employees who fear retribution for

stating negative opinions and mistrust the motives of the administration may feel uncomfortable completing the survey. Under such circumstances, the sample could be skewed in the direction of respondents who have relatively high levels of trust in the university and may negatively affect the generalizability of results of the study.

The third limitation is related to the generalizability of study findings. Study data are collected from a single state university in the Midwest. This defines the parameters of inference and the extent to which findings may be generalized. Therefore, study findings may not be generalized to other colleges or universities without caution. In addition, empowerment is not a global construct generalizable across different life situations and roles. Replication of this study in different geographical locations or additional higher education settings may extend the implications of findings beyond the subject institution.

Finally, results may not be generalizable to organizations with larger minority populations because this particular university had a relatively small minority population (approximately ten-percent).

Organization of the Study

Five chapters form the organization of this study. The first chapter introduces the study. Chapter II focuses on a review of literature so as to provide a context for the current study of empowerment and to show how the studies of empowerment, organizational climate, and organizational trust are related.

Chapter III reviews the study methodology beginning with the hypotheses and assumptions of the research. Methodology elements include the measurement instruments, sample selection, and data collection procedures. Human subjects' protection strategies are provided. The chapter concludes with data analysis procedures.

In Chapter III, the hypotheses and methods used to examine the relationship between employee empowerment and organizational support for innovation are described. The hypotheses, measurement of the variables, sample, data collection, and data analysis methods are discussed.

Chapter IV presents and describes the results of data analyses related to the hypotheses presented in Chapter II. Descriptive data detail concepts of the study and characteristics of the sample. This chapter also includes a discussion of the validation and construction of instruments, the reliability of the instruments, assumptions for the statistical analyses, and demographic characteristics of the respondents.

Finally, Chapter V summarizes the major research findings and discusses the study's implications for management practices. The chapter concludes with recommendations for future research.

CHAPTER II

LITERATURE REVIEW AND THEORETICAL FRAMEWORK

This study will examine the relationships between employee empowerment and organizational support for innovation and organizational trust. Specifically, this study will (a) review the relevant literature on each on the three key variables of empowerment, innovation, and trust; (b) establish core conceptualizations of empowerment; (c) highlight research on empowerment, innovation, and trust that is specific to higher education; (d) develop a model of employee empowerment by drawing on constructs and concepts from existing theoretical research bases; (e) assess the dimensionality of empowerment; (f) assess the relationships between empowerment constructs and organizational support for innovation and organizational trust among non-academic professional employees in higher education; and (g) identify moderating effects of these relationships for individuals within the university.

The following review addresses the applicable related literature on empowerment, and focuses in more detail on the dimension of employee empowerment. This is followed by a review of research on (a) employee empowerment in higher education institutions, (b) organizational climate and support for innovation in higher education settings, and (c) organizational trust.

Empowerment

Employee Empowerment

The concept of employee empowerment has been integrated into the field of management and now forms a basic assumption in many management techniques (Wilkinson, 1998). During the past two decades, employee empowerment has been widely studied in different work groups or environments, such as faculty and administrators in colleges and universities (Moran & Volkwein, 1988; Peterson & White, 1992), nurses (Faulkner & Laschinger, 2008; Knol & Van Linge, 2009; Koberg et al.,

1999; Laschinger, Finegan, Shamian, & Wilk, 2001; Tarnowski & Van Ess Coeling, 1994), hotel staff (Amenumey & Lockwood, 2008), life insurance company staff (Thorlakson & Murray, 1996), public welfare caseworkers (Petter et al., 2002), accountants (Taborda, 2000), teachers (Dee, Henkin, & Duemer, 2003; Hayes & Lunsford, 1994; Marks & Louis, 1999), and social workers (Itzhaky & York, 2000).

In recent years, more than 70% of organizations have adopted some kind of empowerment initiative in their workforce (Spreitzer, 2006; Spreitzer & Doneson, 2008). Although employee empowerment is an important component of contemporary management in both public and private organizations (Petter et al., 2002; Pitts, 2005; Seibert et al., 2004; Spreitzer, 1995), interest in employee participation can be traced backed to the human relations movement and the Hawthorne studies of the 1920s (Pitts, 2005).

Lewin's (1947) study is among the earliest work on employee involvement (Mathieu, Gilson, & Ruddy, 2006). Prior to 1990, empowerment was mainly studied from a sociological perspective (Kotze, Menon, & Vos, 2007). Managers believed that treating their employees in a humanitarian manner would generate benefits to the company (Gandz, 1990). This approach to employee empowerment focused on the transfer of power and authority (Boudrias et al., 2004) and emphasized the act of granting power to an employee (Kotze et al., 2007). However, such empowerment took place within the context of a strict management agenda: "It is employers who decide whether and how to empower employees" (Wilkinson, 1998, p. 1). The concept of empowerment underlies much of the early work on leadership and management from the people-oriented and democratic approaches (Pitts, 2005).

Empowerment emerged in its modern form in the late 1980s. Peters and Waterman's "In Search of Excellence" (1982) laid the foundations for the modern empowerment movement (Wilkinson, 1998) as organizations pursued advantage in an increasingly competitive global economy (Thorlakson & Murray, 1996). Bureaucratic

models, in which creativity was muted and workers felt alienated, evolved to simpler, intuitive styles of management in which organizations became more flexible, innovative, and responsive (Wilkinson, 1998). Supervisors and managers were encouraged to treat their subordinates as equals, to value their input, and to trust the ability of subordinates to use their discretion in implementing tasks. It was expected that organizations would be transformed into systems characterized by trust relations, teamwork, and empowerment. As jobs became more complex, employees were given greater flexibility in their workplaces. Such restructuring was seen as prudent and essential to increased organizational efficiency (Wilkinson, 1998) and to meeting customers' needs. All these arguments share a common assumption: "Workers are an untapped resource with knowledge and experience and an interest in becoming involved which can be released by employers providing opportunities and structures for their involvement" (Wilkinson, 1998, p. 2). The basic view was to get "workers to do what needs to be done rather than doing what they're told" (Darraugh, 1991, p. 3) by creating opportunities to develop feelings of self-efficacy and by removing conditions that contributed to feelings of powerlessness (Conger & Kanungo, 1988).

Employee empowerment, thus, was considered to be a powerful mechanism for increasing employee involvement (Lawler, 1986) and for motivating task accomplishment (Conger & Kanungo, 1988). Research has shown that employee empowerment enhances the value of work for individuals, increases job satisfaction, and contributes to work productivity and success (Eylon & Au, 1996; Fulford & Enz, 1995; Koberg et al., 1999; Spreitzer, 1995). An empowered workforce is more likely to perform at higher levels (Thomas & Velthouse, 1990). In contrast, disempowered employees can be costly, not only in terms of turnover but also in terms of reduced job satisfaction and increased absenteeism (Karasek, 1990).

One outcome of employee empowerment is increased employee self-efficacy (Conger & Kanungo, 1988). Liden et al. (2000) argued that employee empowerment

enables an organization to share decision making at lower levels of the organization by providing employees access to authority, information, resources, and support across all levels, and the opportunity to learn and develop (Kanter, 1977; Lawler, 1986). Other scholars maintained that enriched work environments that were empowering would lead to improved performance (Kanter, 1977; Lawler, 1986). Thus, organizations would benefit from improved employee attitudes and increased organizational effectiveness (Kanter, 1993).

Research has also confirmed that empowering structures have positive outcomes for organizations in terms of firm, unit, and team performance (Spreitzer, 2007). As empowered employees gain more discretion over how their jobs are performed, their levels of self-efficacy increase because they decide the best way to perform a given task (Gist & Mitchell, 1992). They are likely to be more adaptable because of the increased flexibility that accompanies empowerment (Scott & Bruce, 1994), enabling organizations to be more flexible and responsive (Bowen & Lawler, 1992; Conger & Kanungo, 1988). Empowerment potentially removes the constraints imposed on employees who have customer contact and gives these employees flexibility as they serve customers' needs (Reardon & Enis, 1990). Furthermore, Conger and Kanungo (1988) emphasized that empowerment is important for stimulating and managing change in organizations. In their study of human service employees, Wallach and Mueller (2006) found that employee participation in decision making was related to stronger feelings of psychological empowerment.

Building on the theoretical model of Spreitzer (1995), Petter et al. (2002) explored employee empowerment further by linking conceptual antecedents, conceptual consequences, and organizational outcomes of empowerment. According to Petter et al. (2002), conceptual antecedents, including supportive culture and interpersonal trust, do not necessarily cause empowerment, but they may be requirements for achieving successful empowerment. The conceptual consequences of empowerment address the

status of the empowered individual and include a sense of fulfillment, greater motivation, and heightened commitment. It is important to note that these consequences are not considered to be components of empowerment because they cannot be granted by management to employees. Petter at el. (2002) suggested that innovation, greater effectiveness, and better performance are secondary results of empowerment. The conceptual consequences of empowerment in turn produce favorable organizational outcomes.

Theories of Empowerment

Empowerment is recognized as an essential factor in managerial and organizational effectiveness by both organizational theory researchers and leadership and management practitioners (Bennis & Nanus, 1985; Conger & Kanungo, 1988; Spreitzer, 1995). Empowerment offers the potential to positively influence outcomes that benefit both individuals and organizations (Liden et al., 2000). Numerous empowerment initiatives have been linked to enhanced job satisfaction (Bacharach, Bamberger, Conley, & Bauer, 1990; Hackman & Oldham, 1980; Laschinger et al., 2001), commitment (Wageman, 1997), and involvement (Lawler, 1986); greater effectiveness (Petter et al., 2002); increased effort (Gecas, 1989); and higher levels of performance (Locke, Frederick, Lee, & Bobko, 1984). Perceptions of empowerment are associated with self-efficacy (Laschinger & Shamian, 1994).

Empowerment, however, can take different forms (Edwards & Collinson, 2002; Petter et al., 2002). Empowerment has been viewed as either an individual or a group attribute (Ryles, 1999), a process (Bennis & Nanus, 1985; Conger & Kanungo, 1988), or an outcome (Ashforth, 1989; Gibson, 1991). It may be derived from the work environment (Kanter, 1993) or from an inner psychological state (Conger & Kanungo, 1988). Petter et al. (2002) pointed out that the definition of empowerment varies depending on the individuals and setting. As a result, the term empowerment has been used loosely in the literature (Thomas & Velthouse, 1990; Wilkinson, 1998).

Researchers have faced dilemmas when attempting to determine if empowerment "works" and what this means in the context of the workplace. The dilemma stems, in part, from definitions of empowerment that range from the individual to the institutional and the psychological to the organizational. These varied definitions raise the question of who/what is the subject or actor when discussing empowerment. Some researchers have defined empowerment solely as a management practice and have focused on organizational structures and policies, and others have defined it as a psychological condition and have focused on empowerment as intrinsic motivation (Liden & Arad, 1996).

Petter et al. (2002) argued that a broad definition of empowerment may actually be necessary in conducting research on empowerment because empowerment cannot be studied in simple, uniform, and consistent ways. Empowerment can mean different things to different people (Honold, 1997; Quinn & Spreitzer, 1997; Zimmerman, 1995), and its meaning is likely to be specific to a particular organization and its employees (Honold, 1997). Zimmerman (1995) viewed empowerment as an open-ended, multilevel construct that requires not only intrapersonal measures but also assessment of behavioral and interpersonal factors. Likewise, Seibert et al.'s (2004) multilevel model of empowerment emphasized both structural (macro level) and psychological (micro level) approaches to empowerment.

Although both structural and psychological approaches to empowerment are found in the literature (Liden & Arad, 1996), structural empowerment and psychological empowerment are two constructs (Knol & Van Linge, 2009; Seibert et al., 2004; Spreitzer, 2007; Zimmerman, 1995). According to Seibert et al. (2004), structural empowerment refers to a work environment whereas psychological empowerment refers to an internal psychological state.

Structural empowerment incorporates a framework, policies, and other determinants that influence behavior in an organization and focuses on the contextual

conditions that enable empowerment in the workplace. Employees with sufficient structural empowerment are able to fulfill the tasks the organization requires of them. Structural empowerment is viewed as a power sharing process through the delegation of responsibility throughout the organizational chain of command (Spreitzer, 2007). Psychological empowerment, in contrast, refers to personal, psychological state determinants and focuses on the psychological experience of workplace empowerment. It is not the conditions of the work context but the reactions of the employee to these conditions that influence their organizational behavior (Knol & Van Linge, 2009; Spreitzer, 1997). Spreitzer (2007) suggested that both perspectives play an important role in the development of a theory of empowerment and may be viewed as complementary as described in the sections below.

Empowerment as a Structural Construct

The structural perspective on empowerment was developed by Kanter (1993) who argued that it is the conditions and situations in the workplace, not personal attributes, that affect employees' work behavior (Manojlovich, 2007). This perspective of empowerment is rooted in theories of social exchange and social power (Spreitzer, 2007). When situations are structured in a way that employees feel empowered, the organization benefits in terms of improved employee attitudes and increased organizational effectiveness (Kanter, 1993). Empowered employees, thus, can influence strategic decision making and change in a positive way (Currie 1999, 2000; Proctor, Currie, & Orme, 1999).

Kanter (1993) identified four structural conditions that are the key contributing factors contributing to empowerment: (a) opportunities for advancement or opportunity to be involved in activities beyond one's job description, (b) access to information about all facets of the organization, (c) access to support for one's job responsibilities and decision making, and (d) access to resources as needed by the employee (Kanter, 1993). Spreitzer (2007) argued that employees, including those who are at low levels of the organizational

hierarchy, can be empowered if they have access to these structural factors. The levels of empowerment in the workplace, therefore, depend on the presence of structural conditions in the environment, with employees' behavior seen as a response to those structural conditions (Manojlovich, 2007). An organization maximizes effectiveness and success when these structural conditions are available to all employees across all organization levels (Kanter, 1993).

This perspective focuses on building more democratic organizations through the sharing of power between superiors and subordinates (Spreitzer, 2006). Power here means having formal authority or control over organizational resources and the ability to make decisions related to one's work role. Hence, organizations can empower employees by adapting policies, processes, practices, and structures from top-down control systems to high participation practices in which power, knowledge, information, and rewards are shared with employees across all levels of the organizational hierarchy (Spreitzer, 2006). Practically, Quinn and Spreitzer (1997) pointed out that managers can empower employees by (a) sharing information about the organization; (b) providing an organizational structure with a clear vision, organizational goals, and identifiable individual roles; (c) developing a team-based alternative to hierarchy that is capable of providing guidance, encouragement, and support, (d) offering relevant training opportunities, and (e) rewarding employees for the risks and initiatives they are expected to take. The researchers suggested that all of these practices are part of the empowerment process.

Empowering structures and practices, thus, are recognized as contextual variables affecting employee feelings of empowerment (Seibert et al., 2004). Participative management, job enrichment, meaningful organizational goals, decreased bureaucracy, and staff involvement in decision making (Kramer & Schmalenberg, 1993) are examples of organizational strategies that may strengthen employees' perceptions of empowerment (Manojlovich, 2007).

However, structural empowerment may tell only part of the story (Conger & Kanungo, 1988; Manojlovich, 2007). It describes the conditions in the work environment, but it does not describe employees' reactions to these conditions (Laschinger et al., 2001). Spreitzer (2006) emphasized that structural empowerment is limited because "it does not address the nature of empowerment as experienced by employees" (p. 203). Thus, structural empowerment alone may not necessarily guarantee success (Conger & Kanungo, 1988; Manojlovich, 2007; Spreitzer, 2006). Conger and Kanungo (1988) argued that it is also important to assess individuals' subjective feelings of empowerment. They defined this subjective experience of empowerment as psychological empowerment and viewed empowerment as a motivational construct.

Empowerment as a Psychological Construct

The psychological perspective on empowerment focuses on the employee's perceptions of empowerment (Spreitzer, 1995, 1997; Thomas & Velthouse, 1990). The focus is on the individual, with empowerment viewed as a personal attribute (Conger & Kanungo, 1988). Thomas and Velthouse (1990) defined psychological empowerment as "changes in cognitive variables, called task assessments, which determine motivation in workers" (p. 667). This psychological perspective views empowerment as organic or bottom-up processing in which empowerment is achieved only when psychological states produce a perception of empowerment within the employee (Mishra & Spreitzer, 1998; Quinn & Spreitzer, 1997; Wilkinson, 1998). Quinn and Spreitzer (1997) emphasized that empowerment is not something managers do to their employees. In other words, employees are empowered only when they perceive themselves to be so (Mishra & Spreitzer, 1998; Quinn & Spreitzer, 1997; Spreitzer, 1995, 1997).

Research has confirmed that psychological empowerment is positively related to a climate of empowerment. It also mediates the effects of that climate on job satisfaction and is a link in the indirect relationship between a climate for empowerment and job performance (Seibert et al., 2004). In addition, empirical studies have shown that

innovativeness of individuals, problem solving skills, and positive upward influencing behaviors are consequences of psychological empowerment (Zimmerman, 1995).

This perspective refers to empowerment as the individual beliefs that employees have about their role in relation to the organization (Bandura, 1989; Spreitzer, 1995). At the individual level of analysis, empowerment is characterized as an enabling rather than a delegating process (Conger & Kanungo, 1988). Psychological empowerment refers to a set of psychological states that are necessary for individuals to feel a sense of control in relation to their work role (Spreitzer, 2007). Building on Thomas and Velthouse's (1990) model, Spreitzer (1992, 1995) defined psychological empowerment as a motivational construct manifested through four cognitions:

- *Meaning* was defined by Thomas and Velthouse (1990, p. 668) as "the value of a work goal or purpose, judged in relation to an individual's own ideals or standards." It refers to the fit between the task requirements of a job and the employee's own values, beliefs, and behaviors (Brief & Nord, 1990). Low degrees of meaningfulness are believed to result in feelings of apathy and detachment (May, 1969).
- *Competence* is concerned with "an individual's belief in his or her capacity to perform activities with skill" (Spreitzer, 1995, p. 1443). In other words, it is the belief that one possesses the skills and abilities to perform a job well (Gist, 1987).
- *Self-determination* is the feeling of having control over one's work and focuses on the individual's sense of having a choice in initiating and regulating actions (Deci, Connell, & Ryan, 1989).
- *Impact* is the belief that one has significant influence over strategic, administrative, or operational outcomes at work (Ashforth, 1989).

Spreitzer (1995, 2007) suggested that, together, these four dimensions reflect an active orientation to one's work role and create the overall construct of psychological

empowerment. In other words, employees feel in control and perceive that they are capable of shaping their work role and context. The experience of empowerment will be limited if any one dimension is missing (Spreitzer, 2007). Creating clear goals, tasks, and lines of responsibility are crucial factors related to feelings of empowerment at work (Spreitzer, 1996). However, Quinn and Spreitzer (1997) maintained that "these are not specific management practices, but rather characteristics reflecting personal experiences or beliefs about their role in the organization" (p. 41).

Finally, Spreitzer (1995) observed psychological empowerment as a process that begins with the interaction between work environment and personality characteristics. This interaction shapes the four empowerment cognitions above, which in turn motivate individual behavior.

In conclusion, empowerment is a complex concept (Quinn & Spreitzer, 1997). Structural or psychological empowerment alone may not be enough to fully capture the concept of empowerment (Seibert et al., 2004). Manojlovich (2007) observed that there are instances when a work setting may lack all the objective features of an empowering work environment, yet a few determined employees may still be able to do whatever it takes to get the job done. Similarly, Conger and Kanungo (1988) pointed out that management practices are only one set of conditions and that those practices may empower employees but will not necessarily do so. Psychological empowerment, therefore, is more than an individual's perceptions of competence but includes active engagement in the community and an understanding of the sociopolitical environment (Zimmerman, 1995).

Menon (2001) emphasized that these two approaches are not mutually exclusive ane offered a comprehensive description of empowerment in which structural and psychological empowerment are interdependent. Research in nurses' work settings found that structural empowerment resulted in higher levels of psychological empowerment (Laschinger et al., 2001). Similarly, Spreitzer (2007) suggested that structural

empowerment is associated with psychological empowerment. Although both perspectives on empowerment are related to performance, psychological empowerment has been conceptualized as a key mechanism in explaining how structural empowerment enables psychological empowerment, which, in turn, contributes to empowerment outcomes (Spreitzer, 2007). Manojlovich (2007) argued that both forms of empowerment are necessary to sustain professional practice behaviors. Spreitzer (2006) summarized structural and psychological empowerment as follows:

> The social-structural perspective is limited because it is organization-centric, and the psychological perspective is also limited because it is individual-centric. A complete understanding of empowerment at work requires the integration of both perspectives. (p. 204)

Researchers have reported that future research on structural and psychological empowerment is needed to further investigate the processes and outcomes of empowerment within organizations (Seibert et al., 2004; Spreitzer, 2007).

Non-Academic Professional Employees in Higher Education

Non-academic professional employees are key components in today's higher education. They are responsible for the day-to-day operations of a university (Smerek & Peterson, 2007). Non-academic professional employees in colleges and universities are staff who are employed for the primary purpose of providing academic support, student services, and institutional support. These assignments require postsecondary credentials or a substantial record of comparable background (Knapp et al., 2009). Scholars have argued that non-academic professional employees are important to all academic departments and that colleges and universities could not function without the assistance of these support staff members who oversee the day-to-day operations (Knight & Trowler, 2001).

In a (1986) study of non-academic employees in higher education, Liebmann showed that non-academic employees outnumbered faculty members nationally and "could be considered chiefly responsible for the successful daily operation of every

institution of higher learning" (p. 4). The National Center for Education Statistics reported that there were 516,582 non-academic, full-time professional support/service staff members in postsecondary institutions in the United States (2003). Between 1993 and 2003, full-time non-academic professional support/service staff increased by 48.7%, whereas full-time faulty grew by only 14.8%. Because of the bureaucratic nature of higher education, Liehmann (1986) argued that higher education management will always require large numbers of professional staff to function. Although the large majority of studies in higher education focus on faulty and students, non-academic, full-time professional staff members at colleges and universities are often overlooked in research (Liebmann, 1986; Smerek & Peterson, 2007).

Empowering Non-Academic Professional Employees in Higher Education

Knight and Trowler (2001) pointed out that one of the challenges in working with non-academic support staff members in higher education is the creation of an environment that will draw out the best in each individual and motivate the individual to perform at a high level in order to strengthen the organization and increase its effectiveness. Because the success of the total academic operation depends upon all employees, non-academic professional staff members must have a feeling that they belong and that they are making a valuable contribution toward achievement of institutional goals both as members of a team and as individuals. Each must feel essential to the effectiveness of the organization. And just as faculty benefit from sharing ideas about useful techniques, concepts and developments, Knight and Trowler (2001) suggested that non-academic professional staff also learn from each other and should have the time provided for them to meet and engage in collaboration.

Knight and Trowler (2001) argued that academic thoughtlessness and peremptory treatment of support staff cause inefficiencies in general and make non-academic professional staff feel like second-class citizens if management and faculty are insensitive

to their feelings and job needs. A related study by Pitman (2000) showed that negative responses were found when university non-academic administrative staff were asked to report their perceptions of what academic staff thought of them. The almost unanimous feeling was that academic staff looked down on their non-academic administrative counterparts and did not fully value their role in the university. Pitman (2000) argued that these responses suggested an element of resignation, that is, non-academic administrative staff felt that they were operating in a situation where they respected their colleagues but that the feeling was not reciprocated. This study indicated that non-academic administrative staff seemed to believe that academic staff felt superior to them, even though this was not necessarily evidenced by the behavior displayed by academic staff. Although non-academic administrative staff members play a vital role in supporting the teaching and learning processes of the university, they may believe that their roles are not valued.

Knight and Trowler (2001) suggested that there is no reason why the principles that apply to relationships with academic staff should not apply to non-academic professional staff members. They concluded that management should apply the principles of empowerment to incorporate non-academic professional staff in decisions, to encourage them to manage the ways in which they get the work done, and to be considerate.

Employee empowerment may be expected to have effects on non-academic professional employees in colleges and universities. The increased discretion and flexibility experienced by empowerment may make them feel better about their jobs, reduce the stress they feel in performing their jobs, increase their confidence in performing job-related tasks, and increase their ability to adapt to changing conditions they encounter. Empowerment may encourage non-academic professional employees to raise awareness of best practices and help improve the overall quality of the entire university. Empowering employees to reflect on their jobs can spur individual thought

and inquiry. Staff appraisals through the process of empowerment can provide opportunities to celebrate efficiencies that have been achieved and to talk through areas that remain problematic (Knight & Trowler, 2001).

Empowerment is "about risk taking. . . [about] trusting people" (Quinn & Spreitzer, 1997, p. 38). In the fragmented, decentralized systems of work environment in higher education, where frequent direct observation of personnel is generally impractical and there are limited connections between people, the trust factor may become even more important.

Innovation

Although change and innovation are often used interchangeably, the literature provides evidence of a clear distinction between the two terms. "Change and innovation are not the same thing" (Seymour, 1988, p.1). Change is the adoption of something different; innovation is the adoption of something new (Daft & Becker, 1978). Woodman, Sawyer, and Griffin (1993) characterized innovation as a subset of a broader construct of organizational change. All innovations imply change, but not all changes are innovations (Seymour, 1988). Management and organizational theory scholars have recognized that innovation may affect an organization's ability to successfully compete and to survive in today's rapidly changing and competitive global environment (Gilson & May, 2005).

Aiken and Hage (1971) noted that there was little consensus about the exact meaning of innovation; however, the term has evolved over time. Innovation has been defined as both a process and a product. Mansfield (1963) suggested that innovation is the first use of a new product, process, or idea by any organization. West (1990) defined innovation as "the intentional introduction and application within a role, group, or organization, of ideas, processes, products or procedures, new to the relevant unit of adoption, designed to significantly benefit the individual, the group, organization or wider society" (p. 9). Although innovation is considered as "the first use ever or its newness to a population of organizations" (Damanpour, 1987, p. 676), it is important to

point out that innovation can be either the first or the early use of an internally generated or borrowed new idea to the adopting organization, regardless of whether such idea has already been adopted by other industries or organizations (Becker & Whisler, 1967; Damanpour, 1991; Pierce & Delbecq, 1977).

As a process, innovation is considered to be the "successful implementation of creative ideas within an organization" (Amabile, 1988, p. 126). During the process, employees may attempt to change some aspect of their work or their work products in order to gain some benefit they value (Gilson & May, 2005). Some of these benefits are higher productivity, better product or service quality, better working conditions, and improved interpersonal processes (West & Farr, 1990). As a product, Barnett (1953) defined innovation as simply the invention of something new.

For the purpose of this study, Damanpour's (1991) definition of innovation will be used. Damanpour (1991) defined innovation as an "adoption of an internally generated or purchased device, system, policy, program, process, product, or service that is new to the adopting organization" (p. 556). He argued that this definition is broad enough to include different types of innovations pertaining to all parts of organizations and all aspects of their operations (Damanpour, 1991).

Types of Innovation

Daft's (1978) dual-core perspective on innovation types suggested that two cores of innovations co-exist in organizations: the technical core and the administrative core. Each core has its own participants, its own goals, problems, activities, technology, and environmental domains, but both cores are considered as essential to total organization functioning (Daft, 1978).

Technical core innovations are those that bring change to organizations by introducing changes in the technology. Technical innovations occur as a result of the use of a new tool, technique, device, or system. In contrast, administrative innovations are changes that pertain to an organization's structure or its administrative processes.

Administrative innovations are fundamentally different from technological innovations as the former are only indirectly related to the basic work activity of the organization and the latter are more immediately related to its management (Damanpour, 1987).

Innovation can take place in either core. Past research has demonstrated that types of innovations do not relate equally to the same organizational factors, and the process of initiation or implementation of different types is not necessarily identical (Damanpour, 1987). For example, experts in the technical aspect of an organization tend to be those people who work on or near the core technology (Thompson, 1965); administrative innovations, in contrast, tend to be proposed and approved near the top of the hierarchy and implemented downward. Therefore, it is imperative to separate and clearly identify the types of innovation. Otherwise, explanatory power of innovation may be weakened if these two concepts are combined and interpreted as synonymous. Daft (1978) argued that administrators have a definite role initiating innovations but that these are probably limited to administrative ideas. The differentiation between types of innovation, therefore, is necessary for understanding innovation adoption behavior in organizations and identifying the determinants of innovation (Damanpour, 1987; Downs & Mohr, 1976; Knight, 1967; Rowe & Boise, 1974).

The Innovation Process

Innovation is viewed as a multistage process characterized by a series of relatively distinct activities that involve a proposal for change and its later adoption and implementation (Aiken & Hage, 1971; Scott & Bruce, 1994; Thompson, 1965; Wilson, 1966; Zaltman, Duncan, & Holbek, 1973). Individual innovation begins with problem recognition and the generation of ideas or solutions, either novel or adapted. During the next stage of the process, an innovative individual seeks sponsorship for an idea and attempts to build a coalition of supporters. Finally, during the third stage of the innovation process, the innovative individual completes the idea by producing "a prototype or model of the innovation…that can be touched or experienced, that can now

be diffused, mass-produced, turned to productive use, or institutionalized" (Kanter, 1988, p. 191).

Innovation processes may vary among organizational members differentially situated in the organization's structure. Such vertical differences may be the results of qualitative differences between levels in terms of functions, constraints, and opportunities that serve to promote differences in the activities and interests of organizational members (Aiken, Bacharach, & French, 1980). Therefore, innovative ideas may move through the hierarchy in different directions, and the direction taken may affect chances for adoption. In addition, the origin of innovative ideas may be related to task domain. Organization members who work within a functional area will tend to be the local experts in that area. They will be the most knowledgeable people in the organization regarding problems, new ideas, and the suitability of ideas for use in their task domain. A new idea thus will be brought into the organization by experts in the organization who are interested in and aware of that particular kind of development.

Organizational Climate and Support for Innovation

The concept of a work environment as comprising both organizational culture and climate not only provides organizational members with an understanding of the meaning of their organization and their internal work environment, but also is crucial to understanding the various influences on employee performance (Putten et al., 1997).

Although organizational culture and climate are often used interchangeably, Peterson and White (1992) indicated that these two concepts have varying definitions. The embedded assumptions shared by members of the organization are based more on the implicit content of culture, which is more difficult to identify (Peterson & White, 1992), and to change (Perry LeMay, Rodway, Tracy, & Galer, 2005). In contrast, climate focuses on common perceptions of many different organizational phenomena (Allaire & Firsirotu, 1984). Peterson and White (1992) defined that culture as "those aspects of organizational and higher educational life that provide important *meaning* to our life and

work in and for the institution whereas climate is more akin to changing conditions around us“ (p. 181).

Changes to organizational climate are more achievable than changes in culture (Perry et al., 2005) because measures of climate focus on organizational phenomena, which are more specific and objective than those of culture, and participants' views of the organizational climate are based on more explicit content and are more easily discerned. According to Seibert et al. (2004), organizational climate is capable of capturing employees' perceptions of the overall pattern of organizational activities. Therefore, this study focuses on organizational climate in examining the relationships between perceived organizational support, organizational trust, and empowerment.

Organizational climate has been found to be an important antecedent of innovation (Mohamed & Rickards, 1996; Tesluk et al., 1997). Employee assessment of organizational support for innovation is highly related to perceptions of organizational climate. A variety of climate factors influence perceptions of support for innovation, including the way ideas and risk are received and handled, and the way employees are valued as individuals (Amabile & Gryskiewicz, 1989; Scott & Bruce, 1994; Young, 1993).

The nature of innovation is that it requires risk. Employees must feel safe and supported in their work environments if they are to engage in high-risk activities (Fedor, 1996). Supporting innovation means creating a climate that is open, supporting creativity, diversity of ideas, information sharing, freedom of expression, and collaboration (Burningham & West, 1995; Ekvall, 1996; Henkin & Davis, 1991; Mathisen & Einarsen, 2004; Siegel & Kaemmerer, 1978; Young, 1993).

Supportive climates are also characterized by high levels of trust (Anderson &West, 1998; Mathisen & Einarsen, 2004). Individuals need to feel that new ideas are given fair evaluation and that feedback to the individual by management is constructive (Amabile, Conti, Coon, Lazenby, & Herron, 1996; Arvonen & Ekvall, 1999). Employees

must be given the freedom to take initiative while knowing that any inevitable failures of experimentation are tolerated and viewed as learning experiences (Arad et al., 1997; Mathisen & Einarsen, 2004; Siegel & Kaemmerer, 1978).

Studies of climate in higher education institutions describe organizational climate as the "current, common patterns of important dimensions of organizational life or its members' perceptions of and attitudes toward them" (Peterson & White, 1992, p. 181). Similarly, Schneider and Rentsch (1988) described institutional climate as the organizational policies, practices, and procedures that communicate the goals that are important to an organization and that create a sense of institutional imperative. For purposes of this study, climate is defined as the current, common patterns of important dimensions of organizational life or its members' perceptions of and attitudes toward them (Peterson & White, 1992).

Perry et al. (2005) suggested that there is a positive correlation between climate and performance found in the literature. Rhoades and Eisenberger's (2002) theory of organizational support proposed that when employees believe that their organizations value their contributions and care about their well-being, they may reciprocate such perceived support with increased commitment, loyalty, and performance. Similarly, Peterson and White's (1992) study found that faculty and academic administrators' perceptions of their organizational climate influenced their motivation and individual performance.

Support for innovation has been defined as the extent to which an organization facilitates the development and use of new ideas among its members (Davis, Strand, Alexander, & Hussain, 1982; Siegel & Kaemmerer, 1978). Perceived support for innovation may function to affect attitudes toward risk taking and receptivity to new ideas (Siegel & Kaemmerer, 1978), strengthen affective attachments to the organization, and encourage constructive innovation on behalf of the organization (Eisenberger et al., 1990). Some scholars have argued that when individuals perceive their organizational

climate to be supportive of innovation, they tend to engage more often in innovative acts (Gilson & May, 2005).

Research by Eisenberger, Fasolo, and Davis-LaMastro (1990) found that employees with high levels of perceived support were more likely to engage in innovative acts without the anticipation of direct reward or personal recognition. In their study of 531 hourly and managerial employees in a large steel plant, Eisenberger et al. (1990) found that perceived support was positively related to innovation as measured by the constructiveness of anonymous employee proposals to aid the organization. Their results showed that voluntary suggestions for improving the organization were offered more frequently by those perceiving that the organization valued their contribution and cared about their well-being. Employees' general perception of being valued and cared about by the organization, as suggested by the study, is positively related to innovation on behalf of the organization in the absence of anticipated direct reward or personal recognition. Consequently, organizational support for innovation may contribute to a work environment in which employees feel secure, free, and empowered to experiment with new ideas (Daft & Becker, 1978, Damanpour, 1991; Siegel & Kaemmerer, 1978), and may affect an organization's ability to promote change and innovation and, ultimately, to successfully compete and survive (Gilson & May, 2005). Organizational support for innovation may lead to an empowering climate that encourages creativity and initiative among employees (Burningham & West, 1995; Seibert et al., 2004).

Results from a longitudinal study on individual innovation at work suggested that individual work role innovation may be due more to individual personality factors or creativity than to people's perceptions of the supportiveness of their social environment (Bunce & West, 1995). This contrasts with the findings of a study by West and Anderson (1994) on group-level innovation in which both individual and group-climate factors were significant predictors of group-level innovation.

Employee Empowerment and Support for Innovation

Spreitzer (2007) suggested that employees experience more empowerment in supportive organizational environments in which they feel valued and affirmed. Perceived organizational support results from the generalized beliefs of employees that their organization values their contribution and cares about their well-being (Rhoades & Eisenberger 2002). When empowered individuals believe they are autonomous and have an impact, they are likely to be creative; they feel less constrained by technical or rule-bound aspects of work (Amabile, 1988). Moreover, because empowered individuals experience increased self-efficacy, they are likely to be innovative in their work and to expect success (Amabile, 1988; Redmond et al., 1993).

In the health care context, Carney (2004) found that organizational support influences the involvement of nurse leaders in strategic decision making in hospitals. Patrick and Laschinger (2006) also found that when employees perceived that the organization supported their efforts to create empowering work environments, they felt valued, rewarded, and satisfied with their role in performing their work tasks. Organizations that provide opportunities for employees to participate in strategic decision making and recognize their efforts with positive feedback, therefore, are more likely to be perceived as supportive and empowering (Patrick & Laschinger, 2006).

Seibert et al. (2004) conceptualized structural empowerment as a "climate" construct and defined it in terms of employees' shared perceptions of managerial structures, policies, and practices. They further hypothesized a mediating role for psychological empowerment in the relationship between structural empowerment and empowerment outcomes. Their findings suggested that empowerment climate is an important aspect of an organization's effort that contributes to employees' experiences of empowerment (Seibert et al., 2004).

In the context of higher education, for example, the library staff at the Indiana University-Bloomington Library engaged in a series of fundamental structural changes

and assessment strategies to reform the university's library system. In seeking a new strategic vision for the library's future role and mission, the university recognized that innovation must be encouraged by organizational elements, such as organizational structures, budget decisions, and reward system, in order to sustain and expand empowerment and creativity, whereas bureaucratic review and approval procedures were elements that discouraged risk taking and change (Neal & Steele, 1994).

In contrast, employees who work in an organization with low levels of support may feel that they cannot accomplish their goals. When support is lacking, employees are likely to become frustrated and dissatisfied with their roles (Patrick & Laschinger, 2006). Cameron and Masterson (2000) suggested that limited access to funding and lack of power at policy-making levels were examples of organizational structures that diminished nurse executives' capacity to respond to change. Likewise, Thomas and Dunkerley (1999) found that employees' attitudes towards the job and the organization became increasingly cynical and bitter when they felt that their physical and emotional devotion to the organization went unrewarded.

Organizational Support for Innovation in Higher Education

Aiken and Hage (1971) suggested that organizations adopt innovations continually over time. Organizations that are innovative are often characterized by an orientation toward creativity and innovative change. The success of institutional change efforts may depend on the extent to which organizational members perceive their organizational climate as supportive of innovation, change, and risk-taking behaviors (Basadur, 1995; Siegel & Kaemmerer, 1978). Therefore, it may be important for higher education institutions to acquire internal mechanisms that can stimulate and encourage new ideas for innovation proposal, adoption, and implementation to occur.

A supportive work environment may stimulate and encourage new ideas for innovation proposal, adoption, and implementation to occur. On the one hand, a supportive climate may provide an empowering work environment that allows

individuals to work independently in the pursuit of new ideas (Kanter, 1983; Siegel & Kaemmerer, 1978). Pitts (2005) pointed out that some governments implemented empowerment initiatives to encourage their employees at lower levels to take risks, be creative, and find ways to best serve citizens and stakeholders. On the other hand, Thomas and Velthouse (1990) argued that organizational environments can have a strong influence on empowerment because employees' judgments about the observable organizational conditions are shaped by their interpretations. In other words, employees actively perceive their environments and are influenced by their perceptions rather than by some objective reality (Bandura, 1989; Spreitzer, 1996).

Seymour (1988) stated that it is essential to understand the nature of the university as an organization in order to understand how innovation and change can be achieved. Colleges and universities have been described as fragmented, divisive organizations; they are composed of many subgroups and numerous smaller academic units oriented toward their own disciplines with individual goals, norms, campus locations, identities, and patterns of interaction (Seymour, 1988). There is a high degree of differentiation and segmentation within a university. This unique organizational structure has been described as a "loosely coupled system" (Weick, 1976). An institution with loose coupling is characterized by decentralized systems and processes, limited coordination among units, greater structural differentiation, limited connections between people, and specialization and redundancy of work and functions (Weick, 1991). In addition, these various fragmented units are in active competition with one another for status, power, and resources (Seymour, 1988). This very nature of institutions of higher education makes collaboration even more difficult because of the lack of connection between people and the increased complexity and fragmentation.

Change, therefore, is a difficult process in institutions of higher education (Seymour, 1988). The segmented structures make innovation or change in these institutions very difficult (Kanter, 1983). Guskin and Bassis (1985) stated that "trying to

change a university is like trying to rearrange a cemetery" (p. 13). Thus, many institutions of higher education operate with no great sense of urgency for change. Cohen and March (1974) used the term *organized anarchies* to describe the fluid, inconsistent, and amorphous decision-making environments of universities. They argued that change in higher education is more likely to be unintended and unplanned in these environments.

According to Seymour (1988), "A climate for innovation is therefore not a natural happenstance. It must be orchestrated" (p. iv). Guskin and Bassis (1985) argued that:

> Such an environment is directed by relatively clear priorities; it is structured through collaboration and participation of members from throughout the organization, and it is energized by faculty and staff who have developed a sense of potency. Building such an organizational environment requires leaders who have a vision of the future that is congruent with institutional priorities, who are committed to empowering people throughout the organization, and who understand how to use fiscal, human, and symbolic resources to emphasize institutional directions, (p. 14)

Eisenberger et al., 1990, reported that employees' perceptions of being valued and cared about by the organization are positively related to innovation on behalf of the organization. Thus, employees with high levels of perceived organizational support may be more willing to provide voluntary suggestions for improving the organization in the absence of anticipated direct reward or personal recognition, thus contributing to the organization's long-term growth and success. Research has shown that employees who perceived high support expressed stronger feelings of affiliation and loyalty to the organization. Perceived support was also found to be positively related both to attitudinal and behavioral measures of affective attachment (Eisenberger et al., 1990).

In sum, employee empowerment has the possibility of sustaining organizational change and innovation. Innovation is a function of the organizational context, and innovative behavior is stimulated, facilitated, and enhanced by structural conditions (Kanter, 1988). Although structural change that encourages innovation or quality could be implemented, Neilson (1986) argued that structural change would not create behavioral change without empowerment as a mediating variable. Through the process of

empowerment, employees create or are given opportunities to control their own destinies and influence decisions that affect their lives that may result in innovative behaviors (Zimmerman, 1995).

Research has shown that structural empowerment results in higher levels of psychological empowerment, leading to important outcomes for the organization (Laschinger et al., 2001). Employee empowerment, comprising both structural and psychological constructs, therefore, is purported as the bridge that allows structural change to have meaning that translates into more effective behaviors within the workplace. In addition, empowered employees may actively shape their work environments to further enhance their own empowerment through organizational support and their actions. Spreitzer (2007) suggested that higher performing employees may be given more autonomy in their workplace that contributes to more structural empowerment which, in turn, enables more psychological empowerment.

Organizational Trust

Trust is recognized to be at the core of all social exchange relations (Gambetta, 1988; Gilbert & Tang, 1998; Mishra & Morrissey, 1990) and collective action (Luhmann 1979, Parsons 1951), and a critical component in well-functioning organizations (Tschannen-Moran & Hoy, 2000). Culbert and McDonough (1986) described the importance of trust in the following way: “With trust and trusting relationships imperfect plans can be made to work; without trust and trusting relationships even the most perfectly conceived plans can fail” (p. 171).

Trust refers to “a belief, attitude, or expectation concerning the likelihood that the actions or outcomes of another individual, group or organization will be acceptable or will serve the actor's interests” (Sitkin & Roth, 1993, p. 368). It is the extent to which “one is willing to ascribe good intentions to, and have confidence in, the words and actions of other people” (Cook & Wall, 1980, p. 39).

Sitkin and Roth (1993) suggested that trust can be viewed as an individual attribute, a behavior, a situational feature, and an institutional arrangement. As an individual attribute, scholars have focused on an individual's trust in the motives of others and on individual characteristics associated with being perceived as trustworthy. From a behavioral approach, scholars have conceptualized high trust behavior as cooperation and low trust behavior as competition. Trust as a situational feature suggests that trust is only necessary under conditions of interdependence, uncertainty that hinges on the choices made by others, and consequentiality. Finally, when trust is viewed as an institutional arrangement, it reflects the use of formal mechanisms, such as contracts, sanctioning capabilities, and procedures, as administrative or symbolic substitutes that can enhance the legitimacy of an otherwise suspect arrangement (Meyer, 1983; Shapiro, 1987; Sitkin & Roth 1993).

Without trust, in contrast, employees may find it difficult to function or cope effectively with the demands of interdependence within the organization (Gilbert & Tang, 1998). Mistrust of management has been cited as the primary obstacle in employer/employee relations (McCune, 1998). Distrustful employees are less effective than those who trust (McCune, 1998). Research has suggested that a lack of predictability and safety in organizational relationships results in low organizational performance (Cox, 1993). If employees feel betrayed or mistrusted by management, they may engage in destructive organizational behaviors (Gilbert & Tang, 1998). Mistrust results when information is withheld, resources are allocated inconsistently, and employees have no support from management (Cook & Wall, 1980). Without trust, people will not risk disclosure of feelings, opinions, and attitudes (Mishra & Morrissey, 1990). Managers in both public and private sectors face the challenge of fostering trust in today's rapidly changing environment (Gilbert & Tang, 1998).

Employee empowerment is based on a foundation of trust. Chan et al. (2008) recognized the important role that trust plays in ensuring the success of the empowerment

process in which empowerment and trust are intertwined. On the one hand, empowerment is the key to understanding trust and trusting relationships in an organization (Culbert & McDonough, 1996). Trust requires an individual's willingness to invest in an internalized definition of the organization, but employees will not internalize a system that is not personally and professionally empowering to them. On the other hand, employee empowerment results from the internalization of a framework that is grounded in personal meaning and is responsive to the larger aims of the organization (Culbert & McDonough, 1986). Argyris (1986) argued that a climate of trust is an essential element of effectiveness in an organization. Trust is viewed as a key element for superior individual performance, the most efficient governance mechanism, and a critical component for competitive success in a dynamic and turbulent environment.

Both organizational researchers and practitioners observe the necessity of trust to ensure a successful empowerment program (Argyris, 1998; Mayer, Davis, & Schoorman, 1995). Trust has significant impacts on important organizational factors such as job satisfaction (Cook & Wall, 1980; Cunningham & MacGregor, 2000; Driscoll, 1978) and organizational effectiveness (Cunningham & MacGregor, 2000; Mishra, & Morrissey, 1990). In addition, trust affects the availability of timely and accurate information and resources to the organization and facilitates cooperation among individuals as they work together and share responsibility for the organization's best interests (Taylor, 1990). Spreitzer (1996) found that sociopolitical support, access to information, and access to resources were related to the psychological empowerment of middle managers. Without trust, empowerment initiatives may fall short in achieving their intended purposes.

Thomas and Velthouse (1990) suggested that empowered workers have higher levels of concentration, initiative, and resiliency and, as a result, are more effective in their jobs. Although empowerment initiatives enhance feelings of self-efficacy and are linked to enhanced job satisfaction and commitment (Wageman, 1997), increased effort (Gecas, 1989), higher levels of performance (Locke et al., 1984), and improved job

satisfaction (Bacharach et al., 1990; Hackman & Oldham, 1980), other empirical research, however, has indicated that employees do not always respond positively to such initiatives (Maynard, Mathieu, Marsh, & Ruddy, 2007).

Oreg (2006) found that efforts in empowering employees often fell short of expectations or failed altogether. Some studies have provided evidence of positive performance results accruing from the use of empowerment teams at both the individual and the team levels of analysis, whereas other studies have shown no effects or even negative influences. Spreitzer (1995), for example, found only a moderate relationship between empowerment and performance-related outcomes. Pasmore and Fagans (1992) found that empowerment may actually yield negative outcomes. In their study of employees' resistance to empowerment, Maynard, Mathieu, Marsh, and Ruddy (2007) pointed out that prior research demonstrated increased levels of employee absenteeism and turnover after empowerment initiatives were introduced (e.g., Cordery, Mueller, & Smith, 1991).

Culbert and McDonough (1986) argued that employee empowerment results from the internalization of a framework that is grounded in personal meaning and is responsive to the larger aims of the organization. The need for empowerment, however, makes people vulnerable to the organization (Culbert & McDonough, 1986). "Being vulnerable implies that there is something of importance to be lost" (Mayer et al., 1995, p. 712). Culbert and McDonough (1986) stated that "no one willingly internalizes a system that weakens his or her sense of personal empowerment" (p. 178). When employees perceive that an organizational system is not trustworthy (i.e. the system will not recognize or reward their contributions), employees seek to reduce their vulnerability by emphasizing only those performance areas that can be objectively recorded and defended. Johnson-George and Swap (1982) asserted that "willingness to take risks may be one of the few characteristics common to all trust situations" (p. 1306). "Trust is not taking risk per se, but rather it is a willingness to take risk" (Mayer et al., 1995, p. 712). Tyler and Kramer

(1996) stated that, in the absence of trust, "people are increasingly unwilling to take risks, demand greater protections against the possibility of betrayal, and increasingly insist on costly sanctioning mechanisms to defend their interests" (pp. 3-4). As a result, creativity and innovative behaviors may diminish (Culbert & McDonough, 1986).

Empirical research in hospital settings found that empowered nurses reported higher levels of organizational trust (Laschinger, Finegan, Shamian, & Casier, 2000). Likewise, Corsun and Enz (1999) observed that employees' feelings of psychological empowerment were affected by perception of a supportive work climate that was characterized by trust. Gibb (1965) pointed to trust as prevalent in a work environment where employees' opinions are often solicited and employees act on ideas and efforts without the fear of negative outcomes. Sitkin and Pablo (1992) pointed out that a non-threatening environment established by mutual trust allows organizations to pursue more innovative strategies. Such work environments provide employees with the assurance needed for them to act on their perception of meaning, self-determination, competency, and impact, the four basic motivational constructs suggested by Spreitzer (1995).

Thomas, Jansen and Tymon (1997) described these four motivational constructs as "rewards that people could be receiving from their tasks" (p. 17). These intrinsic rewards may function to motivate affective attitude and responses from employees. Chan et al. (2008) argued that such structural interventions produce an affective psychological response such as subordinates' affective trust for their supervisors. Affective trust is conceptualized as an emotional response to perception of care and concern from the party to whom the trust is directed (McAllister, 1995). In the context of empowerment, employees' perceptions of organizational support obligate employees to reciprocate with affective trust for their supervisors. Therefore, it is anticipated that structural interventions would positively affect subordinates' trust both cognitively and affectively (Chan et al., 2008).

Trust, therefore, is vital to organizational relationships in empowering structures in which an organization places more control over decisions in the hands of front-line employees (Laschinger et al., 2000). Although there is no direct empirical evidence to support the relationship between job structure and trust, Chan et al. (2008) argued that as an organization progresses from a mechanistic to a more flattened organizational structure, the organization trades control for trust in motivating employees' performance.

Trust is the foundation for understanding empowerment in an organization (Culbert & McDonough, 1986). For empowerment to work, trust must first be nurtured so that employees will have no fear of experimenting with new ways of doing things (Chan et al., 2008). In addition, employees need evidence that management can be trusted to do whatever is necessary to ensure that high-quality outcomes are achieved (Kanter, 1977, 1993). For employees to feel empowered, they need to be confident that management values their contributions (Culbert & McDonough, 1986) and that they will not suffer negative consequences when exercised initiatives do not work out as anticipated (Chan, 2003). Without such evidence, an employee may find it difficult to internalize a stable definition of the system that is both personally and organizationally empowering (Culbert & McDonough, 1986).

Researchers have distinguished between interpersonal trust and organizational trust (Barber, 1983; Shapiro, 1987; Sitkin & Roth, 1993; Tan & Tan, 2000; Zucker, 1986). Interpersonal trust refers to the extent to which employees are confident in and willing to act on the basis of the words, actions, and decisions of their managers/supervisors (McAllister, 1995). Organizational trust refers to employees' perceptions of the trustworthiness of an organization, including feelings of confidence and support for the systems in the organization. Systems in the organization refer to the organization's policies, rules, regulations, and procedures (Gambetta, 1988; Gilbert & Tang, 1998; Moye, 2003).

Organizational trust is related to variables such as perceived support for the organization that affect the organization as a whole, whereas interpersonal trust is correlated with proximal variables such as the ability, benevolence, and integrity of one's supervisor (Tan & Tan, 2000). Organizational trust refers to employees' faith in corporate goal attainment and organizational leaders as a whole and to the belief that, ultimately, organizational action will prove beneficial for employees. It also includes the belief that organizational leaders will be straightforward and will follow through on commitments (Gilbert & Tang, 1998).

Although practitioners and researchers often acknowledge that trust is a critical psychological state that determines the success of any empowerment process (Argyris, 1998; Harari, 2002; Mayer et al., 1995), little is known about the impact of empowerment interventions on building subordinates' trust directed toward their supervisors (subordinates' trust), and the impact of subordinates' trust on the extent of psychological empowerment experienced (Chan et al., 2008). Lewis and Weigert (1985) argued that many of the interactions in modem society would be too risky if they were based solely on interpersonal trust. In fact, scholars have acknowledged that a low level of interpersonal trust exists between management and employees (Golembiewski & McConkie, 1975; Mishra & Morrissey, 1990). Culbert and McDonough (1986) indicated that managers often find themselves ill-equipped to trust and yield to immediate short-term operational pressures, justifying their neglect on the basis that they have "problems to solve," "deadlines to meet," or "fires to put out" (p. 172). In order to cope with low levels of interpersonal trust, organizations create organizational level trust mechanisms as substitutes for interpersonal trust (Fox, 1974; Sitkin & Roth, 1993). These mechanisms are adopted not only to facilitate administrative coordination, but also to achieve a symbolic legitimacy that accompanies institutionalized procedures (Sitkin & Roth, 1993). In fact, Kanter (1977, 1993) maintained that the impact of organizational structures on

organizational behavior is far greater than the impact of employees' personality predispositions. In Culbert and McDonough's (1986) view:

> It will take an organization logic that is sufficiently strong to communicate the imperatives of trust in relation to the practice of effective organization management. It will take some ironclad axioms that make it impossible for serious managers to escape the efficiency implications of trust or deny responsibility for their own roles in maintaining high levels of trust. (p. 173)

Argryis (1988) pointed out that the main reason that empowerment fails is the unwillingness of employees to assume the responsibilities of the organization. Trust has been identified as one of the contextual and structural factors that could explain whether employees are willing to participate in empowerment (Conger & Kanungo, 1988). A prerequisite for the willingness of employees to take up the offer of empowerment by the organization is the extent to which the organization has exerted its effort to develop trust in the organization (Barnes, 1981; Culbert & McDonough, 1986). According to Chan et al. (2008), no amount of social structural changes will convince subordinates to step up and take charge of their work environment unless such social structural interventions are perceived by employees as trustworthy. They argued that the purpose of empowerment interventions is to create organizational climates that cultivate employees' trust, thus laying the foundation for employees to perceive that they are empowered.

Kanter (1977, 1993) argued that people react rationally to organizational structures. When organizational systems are structured in such a way that employees feel empowered, the organization is likely to benefit in terms of both the attitudes of employees and organizational effectiveness. If managers create work environments that enhance feelings of organizational trust, employees are more likely to perceive high levels of empowerment. Managers who empower their employees are signaling to them that they have trust in them (McKnight et al., 1996). Employees may then reciprocate these feelings by investing in attitudes of trust towards their manager. Likewise, if the organization builds policies and processes that protects employees' interests (e.g., grievance procedures, sexual harassment policies), the organization communicates the

message that employees have some control over their work environment. These feelings of control may, in turn, lead employees to have higher levels of trust in the organizational systems. Organizational trust, therefore, enables employees to gain insight into the impact of their efforts on the overall achievement of organizational goals (Chan et al., 2008).

Organizational trust is an increasingly important element in determining employee performance and commitment to the organization (Laschinger et al., 2000). High levels of organizational trust are recognized as the most direct, economical, and powerful way to enhance organizational outcomes (Gibb, 1978). In contrast, low trust environments may result in control mechanisms and contracts that are filled with endless rules, regulations, policies and procedures that diminish creativity (Mayer et al., 1995; Woolsey, 1997).

Mishra and Morrisey's (1990) study found that over 90% of managers surveyed agreed that the perception of trust is a feeling of confidence and support demonstrated by members of the organization. Their results showed that organizational effectiveness is perceived as dependent on the level of organizational trust. Trust is associated with effective decision making as a result of sharing ideas, information, and feelings; organizational credibility; and increased productivity. Organizational ineffectiveness was attributed to employee distrust of management by 79.4% of those surveyed. Their results showed that trust began with top management and worked its way down through the organization.

Trust in top management is more institutional in nature (Costigan, Iter, & Berman, 1998). Organizational trust is often associated with the efficiency and fairness of the organizational structures that are in place rather than the personal characteristics and behaviors of top management staff (McCauley & Kuhnert, 1992). Organizational trust, therefore, is one of the key indicators of a climate of trust in an organization and has positive effects on employees (Costigan et al., 1998).

McKnight et al. (1998) discussed the effects of institution-based beliefs on organizational trust. They argued that an individual acts in anticipation of a successful future endeavor to the extent to which necessary impersonal structures are in place, specifically that (a) success is likely because the situation is normal and (b) success is likely because contextual conditions, such as promises, contracts, regulations, and guarantees, are in place. Consequently, this systematic social reality leads to organizational trust (Lewis & Weigert, 1985). Creed and Miles (1996), for example, stated that the design of human resource policies and procedures (such as reward, control, and performance management systems) affect employees' perceptions of trust in the organization.

Institution-based beliefs are likely to affect trust and trusting relationships for two reasons: (a) beliefs that a situation is bounded by safeguards enable one to extend those beliefs to individuals in the same situation as being trustworthy; and (b) the institutions reflect the actions of the people involved; therefore, beliefs about the institutions will help form beliefs about the people who are involved in the institutions (McKnight et al., 1998).

In sum, organizational trust provides structural safeguards, including regulations, guarantees, and legal recourse, to individuals in the organization (Shapiro, 1987). Regulations enable people to feel assured about their expectations of the other party's future behavior. Guarantees mitigate the perceived risk involved in forming trusting intentions. Legal recourse allows management to feel comfortable that an expectation has the type of significance in the particular setting so that trusted employees will make every effort to fulfill it (McKnight et al., 1998).

Conclusion

Given that empowered individuals feel increased self-efficacy, which is a determinant of innovative behaviors in workers and that previous research has demonstrated that perceptions of empowerment enhance the value of work for individuals,

increase job satisfaction, and contribute to work productivity, this study seeks to investigate the associations between empowerment and organizational support for innovation, and organizational trust.

Change is inevitable but manageable and controllable. Institutions of higher education do not operate in a vacuum; therefore, they must learn to manage change more effectively. The literature suggests that positive work climates drive performance. In addition, employees' perceptions of organizational climate may condition their attitudes toward risk taking and their receptivity to new ideas. The success of institutional change efforts may depend on the extent to which organizational members perceive their organizational climate as supportive of innovation, change, and risk-taking behaviors.

Although innovation may not directly contribute to productivity and job performance, the role of an empowering organizational climate is crucial. The study of what motivates individuals to be innovative may be the first step to achieving successful institutional change efforts. The present study examines the thesis that a high level of employees' perceived organizational support for innovation may be related to a high level of employees' perceptions of empowerment within the context of higher education. To summarize, the following hypotheses are proposed in this study:

Hypothesis 1: An analysis of empowerment among employees will yield four cognitions of empowerment: meaning, competence, self-determination, and impact.

Hypothesis 2: Higher levels of perceived organizational support for innovation will be positively associated with empowerment.

Hypothesis 3: Higher levels of organizational trust will be positively associated with empowerment.

Hypothesis 4: Higher levels of organizational trust will be positively associated with perceived organizational support for innovation.

Hypothesis 5: The relationship between employee's perceptions of empowerment and perceived organizational support will be affected by organizational trust.

Hypothesis 6: The relationship between employee's perceptions of empowerment and perceived organizational support will be affected by demographic variables such as age, gender, level of education, work division, years in the current university, years of professional experience, and administrative experience.

CHAPTER III

METHODOLOGY

Introduction

This chapter presents the specific methodological procedures that are used in this study: the participants and data collection procedures; the specific measures incorporated into the questionnaire; and the statistical procedures of multiple regression, path analysis, and factor analysis used to analyze the survey results.

This study is designed to investigate the relationships among employee empowerment and perceived support for innovation, and organizational trust. The study hypothesizes that the extent to which the organization values its employees' contributions and cares about their well-being (i.e., provides organizational support) influences their perceptions of empowerment. In addition, it is hypothesized that organizational trust may affect employee empowerment and influence the relationship between perceived organizational support for innovation and employee empowerment.

Participants

Survey respondents for this study are non-academic professional and scientific (P&S) staff employed within a public comprehensive university in a Midwestern state. The university is a state-supported, public institution that offers more than 120 majors across the Colleges of Business Administration, Education, Humanities and Fine Arts, Natural Sciences, and Social and Behavioral sciences, and the Graduate College. All 558 non-academic full-time P&S employees, holding either a term, contract, or permanent position assignment, were invited to participate. P&S employees in temporary appointments or administrative positions who are granted an annual appointment were excluded from this study. There was no other control population. The researcher requested and was given permission from the P&S Council to conduct the research study within the P&S employees at the participating university. (See Appendix A.)

Data Collection Procedures

In this study, the data was collected using a web survey method. A web survey administered on the Internet has been selected for this study because of the following advantages it offers over traditional mail: (a) Web answer buttons may prevent incorrect data entry, (b) a web survey is less expensive than other survey types, and (c) web surveys are an effective way of reaching high-tech respondents with full access to the Internet, which in this study is a major characteristic of the target population (Dillman, 2007; Kaplowitz, Hadlock, & Levine, 2004; Wimmer & Dominick, 2000).

Using the multiple contacts technique suggested by Dillman (2007), participants received a pre-survey notification postcard from the president of the Professional and Scientific Staff Council at the university 3 days before the researcher sent the initial formal request to complete the survey. (See Appendix B.) Kaplowitz et al. (2004) found that mail pre-notices can increase response rates in web surveys. In their study conducted with a large university population, the researchers found that in a population in which each member has Internet access, a web survey application can achieve a comparable response rate to traditional paper survey if the web survey is preceded by a surface mail notification (Kaplowitz et al., 2004).

The web survey was then disseminated to the P&S employees by e-mail sent directly from the President of the P&S Council. (See Appendix C.) Research has revealed concerns of potential survey participants regarding Internet security and the receipt of electronic "junk mail" or "spam" (Sills & Song, 2002). The P&S Staff Council, consisting of representatives elected by non-academic professional staff members, is a well-known and legitimate organization on campus. Dillman (2007) suggested that identifying a survey as being sent from a legitimate and respected sponsor is desirable for demonstrating its legitimacy and usefulness.

The e-mail stated the purpose of the study and requested employees to participate by completing the web survey. Respondents accessed the survey by clicking on the

address of the web site containing the survey site URL (hyperlink) embedded within the e-mail. In the survey instructions, participants were told that they have a week to complete the web survey.

The web survey was prepared using WebSurveyor, an enterprise-level, online data collection service available to the university community at no cost. (See Appendix D.) WebSurveyor uses 128-bit encryption to secure the data transferred between the survey and the server. By securing the survey and connection to the hosting service, respondents can be confident that the data they provide will be viewable only by the researcher. By default, persistent cookies are not required by survey respondents to protect their privacy when responding to a WebSurveyor survey.

The survey instructions in the email assured participants that their participation in this study is completely voluntary and confidential. The instructions also explained that individual respondents will remain anonymous and that the data will be summarized at the overall and division levels so that specific participants cannot be identified in the final report.

An attempt was made to maximize the response rate on the survey in the present study. Studies by Dillman (1978) and King and Delana (2002) suggested sending an email reminder notification 2 days following the initial distribution of the survey and a final reminder at the end of the survey response period to remind the participants to complete the survey if they have not already done so. Dillman (1978) found that reminder notifications increased response rates but that multiple reminders were effective only up to a certain point. For example, individuals tend to respond to a survey within a few days of receiving the initial request. After receiving the first reminder notification, there is typically another peak in survey responses, although not as many will respond to the second request (Dillman, 1978). Subsequent reminder notifications will result in smaller peaks in response rates. Reminder notifications were sent by e-mail versus postal mail because research has found that reminder mail notifications do not produce higher

response rates to web survey for respondents who have received a hard copy pre-notice (Kaplowitz et al., 2004). The employees received a reminder communication 2 days following the initial distribution of the survey (See Appendix E.) and a final reminder at the end of the survey response period. (See Appendix F.)

The researcher requested approval from The University of Iowa's Institutional Review Board (IRB) to conduct this research project and did not commence the study until signed IRB assurance form (See Appendix G.) and IRB approval were obtained. (See Appendix H.) The researcher assured respondents that their participation in the study is completely voluntary and confidential in the informed consent document. (See Appendix I.) Every effort was made to ensure participant confidentiality. No names, addresses, phone numbers, or emails were solicited. Individual respondents remained anonymous, and the data was summarized at the overall and division levels. No individual responses were identified.

To ensure data security, all electronic data was stored on a secure, password-protected Files@Iowa Premium data system provided and maintained by The University of Iowa. Access was restricted to the researcher only. The Files@Iowa interfaces use the Hawk ID authentication to ensure the security of the files. No electronic data was stored, transferred, or transported on any local computers or temporary devices at any time. Survey responses were printed and locked in a safe place. The online survey and all responses were then removed from the Internet.

Variables and Measures

Each of the measures used in this study are described below. The following sections include descriptions of variables in the model of employee empowerment and related measures. The survey instrument contains questions for assessing respondents' levels of empowerment, perceived organizational support for innovation, and organizational trust as well as questions about respondents' backgrounds. All measures incorporated into the survey instrument for this study can be found in the Appendix J.

With the exception of demographic variables, all measures in this study used a five-point Likert response scale that ranges from *strongly disagree* (coded as 1) to *strongly agree* (coded as 5).

Dependent Variable

Measure for Psychological Empowerment

This study uses Spreitzer's (1995) 12-item scale to measure psychological empowerment. Based on the interdisciplinary literature on empowerment from the fields of psychology, sociology, social work, and education, including the work of Conger and Kanungo (1988) and Thomas and Velthouse (1990), Spreitzer (1995) conceptualized empowerment as having four dimensions reflecting individuals' orientation to their work roles: *meaning*, an individual's judgment of the value of his or her work; *competence,* an individual's ability or capability to perform the work activities with skill; *self-determination*, an individual's sense of having a choice of initiating and regulating actions over one's own work, and *impact*, an individual's ability to effect or influence strategic, administrative, or operating outcomes at work. Spreitzer (1995) determined that these four dimensions together provide an overall measure of empowerment.

Spreitzer (1995) empirically validated the scale in a study of mid-level employees from a Fortune 50 industrial company. In her study, the Cronbach's alpha for the overall empowerment construct was .72 for an industrial sample and .62 for an insurance sample (Spreitzer, 1995). The measure was further validated at the individual level by Kraimer, Siebert, and Liden (1999) and has been used and found to be valid in a variety of different contexts (Spreitzer, 2007), including education (Moye, Henkin, & Egley, 2005). Other researchers have reported alpha reliabilities for the scale's subscales that ranged from .79 to .88 (Gagne, Senecal, & Koestner, 1997), from .76 to .85 (Koberg et al., 1999), from. 76 to .85 (Kraimer et al., 1999); from .77 to .92 (Liden et al., 2000), and from .72 to .87 (Siegall & Gardner, 2000). Spreitzer (1995) demonstrated the internal consistency and test-retest reliability of the dimensions of psychological empowerment in

a work context and also found that the measure was not susceptible to social-desirability bias.

Each of the four sub-scales contains three items. The four dimensions contribute to an overall construct of psychological empowerment. Items were summed and averaged to yield total scores of empowerment. Higher levels of empowerment are indicated by higher scores. The total empowerment score served as the dependent variable in regression analyses. To be consistent with other instruments used in the survey, as suggested by Boudrias et al. (2004), respondents were asked to indicate their agreement with empowerment items on a 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*) instead of the original 7-point scale. The Cronbach's alpha coefficients found in Boudrias et al.'s (2004) study (meaning =.92, competence = .86, self-determination = .87, impact = .92, PE = .88) are comparable to the above review.

Intervening Variable

Measure for Perceived Organizational Support for Innovation

This study uses a short form of Siegel and Kaemmerer's (1978) measure of perceived support for innovation proposed by Scott and Bruce (1994). The Siegel Scale of Support of Innovation (SSSI) was developed to assess organizational climate factors assumed to be present in innovative organizations (Siegel & Kaemmerer, 1978). Organizational climate refers to "a set of measurable properties of the work environment that are perceived by those working in the environment and that influence their motivation and behavior" (Siegel & Kaemmerer, 1978, p. 554).

The SSSI is selected for this study because it was designed to measure the extent to which professionals perceive their organizations as supportive of new ideas (Dee, Henkin, & Chen, 2000; Henkin & Holliman, 2009, Howell & Avolio, 1993; Scott & Bruce, 1994; Siegel & Kaemmerer, 1978). Members' perceptions of the climate within the organization were used as the basis for measurement rather than objective variables. Studies using the SSSI scale have been conducted in high schools (N = 2153; Siegel &

Kaemmerer, 1978), engineering companies ($N = 60$; Orpen, 1990), and a university-based school of nursing ($N = 66$; Henkin, Davis, & Singleton, 1993).

Innovative organizations are characterized by an orientation toward creativity and innovative change, support for their members in functioning independently in the pursuit of new ideas, and a tolerance for diversity among their members (Siegel & Kaemmerer, 1978). The initial theoretical dimensions used in the SSSI are based on five climate dimensions assumed to promote creativity: leadership, ownership, norms for diversity, continuous development, and consistency.

Based on their research findings, Siegel and Kaemmerer (1978) constructed a three-factor structure comprised of (a) support for creativity, (b) tolerance of differences, and (c) personal commitment. However, to measure the extent to which employees perceived support for innovation in organizations, as suggested by Howell and Avolio (1993), only two of the three subscales–support for creativity and tolerance of differences–are proposed for this study. Scott and Bruce (1994) also suggested excluding the personal commitment subscale because the construct failed to distinguish between innovative and traditional organizations, and, as the authors believed, commitment is likely an outcome rather than a dimension of climate.

The final climate construct is divided into two sub-categories containing 22 items, with 16 loading on support for innovation and 6 loading on resource supply (Scott & Bruce, 1994). Respondents indicated the extent of their agreement with each item on a 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). The reported Cronbach's alpha reliabilities for the two factors are .92, and .94, respectively (Henkin & Holliman, 2009; Scott & Bruce, 1994; Siegel & Kaemmerer, 1978). These coefficients support the assertion of internal consistency of the measure.

Control Variables

Measure for Organizational Trust

Organizational trust was measured using Moye's (2003) adaptation of instruments previously developed by Bryan (1995), Butler (1991), and Moorman, Zaltman, and Deshpande (1992). The definition of organizational trust as an employee's perception of the trustworthiness of organizational systems is inherent in Moye's 7-item measure. The scale used in the measure is based on a five-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). The reported Cronbach's alpha reliability coefficient is .95 (Henkin, in press).

The following variables were used as controls in the present study: age, gender, level of education, work division, years at the current university, years of professional experience, and administrative experience. Each of these control variables has been suggested by literature reviews on employee empowerment, support for innovation, and organizational trust (Chan, 2003; Dee, 1999; Dee et al., 2002; Henkin, in press; Spreitzer, 1995, 1996).

Reliability and Validity

All of the measures used to construct this instrument have been shown to possess acceptable levels of construct validity in previous studies. However, the wording of some of the items will be slightly modified to match the specific context of the organization in which the instrument is used.

This study utilizes an internal consistency technique, Cronbach's alpha, to assess reliability. Exploratory and confirmatory factor analyses were performed to evaluate the construct validity of employees' perceptions of empowerment, perceived support for innovation, and organizational trust. According to McMillan and Schumacher (1997), a coefficient of .90 indicates a highly reliable instrument, but coefficients ranging from .70 to .90 are acceptable for most instruments.

Statistical Methodology

A series of assumptions related to several statistical methods such as normality, linearity, homoscedasticity, independent error terms, and lack of multicolinearity (Kleinbaum, Kupper, Muller, & Nizam, 1998) were tested before any statistical procedures were conducted. The normality assumption implies that a *t* table gives valid *p* values for hypothesis tests. The assumptions of linearity and mean independence imply that least squares is unbiased. Unbiased methods have no systematic tendency to underestimate or overestimate the true values. The assumptions of homoscedasticity and uncorrelated errors imply that least squares is efficient (Allison, 1999). Descriptive statistics, including frequency distributions, means, and standard deviations were used to summarize respondent characteristics. Then, three statistical methods were used to analyze the data: exploratory factor analysis, multiple regression analysis, and path analysis.

Using factor analysis, the information contained in a number of original variables can be summarized into a smaller set of new composite dimensions with a minimum loss of information (Hair, Anderson, Tatham, & Black, 1998). An exploratory factor analysis, specifically a principal component analysis with a varimax rotation, was used to establish the construct validity of the instruments. Multiple regression is designed to assess the relationship between one dependent variable and several independent variables (Pedhazur, 1997).

Hypothesis 1 was explored by conducting a second order confirmatory factor analysis to identify the dimensionality of employee empowerment. Each of the four empowerment dimensions and the total empowerment score served as dependent variables in regression analyses. A varimax rotation method was used to choose significant factor loading in this study. The items showing loadings below .40 were deleted from the construct.

Ordinary least squares (OLS) multiple regression was used to explain the magnitude and direction of each independent variable's effects on the dependent variable (Allison, 1999; Pedhazur, 1997). Multiple regression is a statistical method for studying the relationship between a single dependent variable and one or more independent variables, and the aim is to determinate whether a particular independent variable affects the dependent variable (Allison, 1999).

When performing regressions, the researcher controlled for demographic variables such as age, gender, level of education, work division, years of professional experience, years in the current university, and administrative experience. Hypotheses 2 through 6 presented in Chapter II were tested by this statistical method. The respective dependent variable was regressed on each of the independent variables within each hypothesis in order to test for significant relationships. The total empowerment score served as the dependent variable in the regression analysis.

Path analysis is an application of multiple regression analysis for examining the direct and indirect effects of variables hypothesized as causes of variables treated as effects (Pedhazur, 1997). Path analysis shows the strength and direction of these causal linkages. However, it should be noted that "path analysis is intended not to discover causes but to shed light on tenability of the causal models a research formulates based on knowledge and theoretical considerations" (Pedhazur, 1997, pp. 769-770). The causal linkages proposed by the researcher were examined by this method.

All tests were performed using the statistical package of SPSS for Windows 14.0 and AMOS 7.0. In this study, the alpha level for significance was set at .05. The researcher established the reliability of the instrument and sample using Cronbach's alpha after collecting the survey data.

Summary

This chapter describes how this study was conducted to investigate the relationships between the level of empowerment and perceived organizational support for

innovations, and organizational trust among non-academic professional staff within a public comprehensive university in a Midwestern state. The study hypothesizes that the extent to which the organization values its employees' contributions and cares about their well-being (i.e., provides organizational support) influences their perceptions of empowerment. In addition, it is hypothesized that organizational trust may affect employee empowerment and influence the relationship between perceived organizational support for innovation and employee empowerment.

Employee empowerment among non-academic professional employees is the dependent variable. Organizational support for innovation is the intervening variable. The control variables are organizational trust and demographic information suggested by related literature.

Study participants were 558 full-time P&S staff members at a Midwestern university. Data was collected using a web survey method. The survey instrument contains questions for assessing respondents' levels of empowerment, perceived organizational support for innovation, and organizational trust as well as questions about respondents' backgrounds.

CHAPTER IV

ANALYSIS OF DATA AND FINDINGS

This chapter includes validation, construction, and testing reliability of the instruments, a discussion of assumptions for the statistical procedures, a description of demographic characteristics of the respondents, and findings of the statistical analysis of data related to the hypotheses presented in Chapter II. The nomenclature used for the attitudinal variables is shown in Table IV-1.

Table IV-1. Nomenclature for Study Variables

Symbol	Name
Emp	Empowerment
Mean	Meaning
Comp	Competence
SDet	Self-Determination
Impa	Impact
OrgInnov	Organizational Support for Innovation
SpInnov	Support for Innovation
ReSply	Resource Supply
OrgTrust	Organizational Trust
Age	Age of Respondents
Gender	Gender of Respondents
Edu	Education Level of Respondents
Dept	Work Division
YrExp	Years of Experience
YrEmp	Years of Employment
AdResp	Administrative Responsibilities
AdPos	Administrative Position

Assumptions

The following assumptions were examined before proceeding with the statistical analyses: (a) The distribution of variables is normal (normality), (b) the relationship among the variables is linear (linearity), (c) the error terms are constant (homoscedasticity), (c) the error terms are independent (independence); and (d) the independent variables are not highly correlated with each other (multicollinearity).

Testing these assumptions is essential to ensure that the results obtained are truly representative of the sample and that the study has obtained the best results possible (Hair et al., 1998).

The first assumption concerning normality among the variables was tested with regression diagnostics. The plots of observed cumulative distribution of residuals against the expected cumulative distribution of residuals lay approximately on normal lines. Thus, there was no evidence that the normality assumption was violated.

The second and third assumptions concerning linearity and homoscedasticity were tested by examining residual plots. The linearity assumption was tested by curve fitting with R-squared difference tests, the homoscedasticity assumption was tested by the Goldfeld-Quandt test, and finally the Durbin-Watson coefficient was used to test the independence of residuals. The distribution of the residual plots from the regression using a dependent variable and independent variables of each equation were used to determine whether the variance of the error was constant or whether the model was linear. The plots showed no evidence of non-linear relationship or heteroscedasticity.

The most frequently used method for determining the degree of multicollinearity is the examination of a correlation matrix of the independent variables. If multicollinearity is present among the independent variables, it will inflate the standard errors of the parameter estimates (Neter, Kutner, Nachtsheim, & Wasserman, 1996). Therefore, the presence of multicollinearity will make it more difficult to detect significant effects. However, the degree of collinearity among the independent variables determines whether multicollinearity is problematic. A bivariate correlation matrix indicated that multicollinearity was not present since no correlations exceeded .90 (Kleinbaum et al. 1998). As shown in Table IV-2, the highest correlation between two independent variables was .75 between Year of Employment at a Midwestern university and Age.

Table IV-2. Correlation Coefficients Matrix among Empowerment, Organizational Support for Innovation, Organizational Trust, Age, Gender, Level of Education, Work Division, Years in the Current University, Years of Professional Experience, and Administrative Experience

	Emp	OrgInnov	OrgTrust	Age	Gender	Edu	Dept	YrEmp	YrExp	AdResp
Emp										
OrgInnov	.386**									
OrgTrust	.268**	.604**								
Age	.332**	.049	-.131*							
Gender	.023	-.052	-.094	-.028						
Edu	.087	-.111	-.082	-.007	-.029					
Dept	-.141*	.028	.025	-.217**	-.025	.000				
YrEmp	.313**	.031	-.056	.635**	.008	-.035	-.319**			
YrExp	.310**	-.055	-.208**	.718**	.013	-.023	-.223**	.647**		
AdResp	.326**	.151*	.071	.170**	-.006	.176**	-.008	.176**	.205**	
AdPos	.329**	.090	.051	.225**	.044	.125*	-.112	.205**	.244**	.774**

Note: ** p<0.01 (2-tailed), * p<0.05 (2-tailed).

Multicollinearity can also be assessed by the Variance Inflation Factor (VIF), which provides the same information as R^2 and Tolerance for determining multicollinearity (Kleinbaum et al., 1998). The variance inflation factor (VIP) is the reciprocal of tolerance so that variables with a low tolerance have large variance inflation factors (SPSS Base 10.0 Applications Guide, 1999). "As the variance inflation factor increases, so does the variance of the regression coefficient" (SPSS Base 10.0 Applications Guide, 1999, p. 221). If the VIF exceeds 10 or R^2 exceeds .90, there is reason for concern. All of the VIP statistics were below 2.0; therefore, multicollinearity was not a problem.

Response Rate and Representativeness

A survey instrument was distributed to all eligible professional and scientific employees ($N = 558$) in the selected university by email. Data were collected in the beginning of the 2010 spring semester. Respondents received a pre-survey notification postcard from the president of the Professional and Scientific Staff Council at the university 3 days before the researcher sent the initial formal request to complete the survey. The e-mail stated the purpose of the study and requested the employees to participate by completing the web survey. Respondents accessed the survey by clicking on the address of the web site containing the survey site URL (hyperlink) embedded within the e-mail. Attempts were made to maximize the response rate on the survey in the present study. The employees received a reminder communication 2 days following the initial distribution of the survey and a final reminder at the end of the survey response period.

The researcher received 258 responses, which yielded a 46.2% response rate. Three of the respondents declined to participate after reviewing the informed consent document. As a result, a total of 255 completed instruments were returned, which yielded a 45.7% net response rate. As Kittleson and Brown (2005) noted, a 40-50% response rate for web-based surveys may be considered “outstanding,” although an acceptable response

rate for web-based surveys may be difficult to determine (Kittleson & Brown, 2005, p. 12). In addition, Sheehan (2001) reviewed 31 studies of e-mail-initiated surveys conducted between 1986 and 2000. She found an average response rate of 36.83%. Therefore, the response rate of this study is considered satisfactory for survey research with professional employee populations (Babbie, 2004).

Moreover, response representativeness may be more important than the response rate in survey research (Cook, Heath, & Thompson, 2000). As Babbie (2004) noted, "a sample is representative of the population from which it is selected if the aggregate characteristics of the sample closely approximate those same aggregate characteristics in the population" (p. 189). When the gender and primary college/division of the survey respondents were compared, the survey respondents closely matched the employee demographics of the university (see Table IV-3). In addition, the gender and primary college/division distributions of the respondents of the present study also closely mirrored the results of two previous staff climate surveys conducted by the university in 2002 and 2004. Thus, the characteristics of the survey respondents resembled closely the characteristics of the study population, and the survey respondents may be assumed to represent similar to those in the population (Babbie, 2004).

Table IV-3. Population and Survey Respondent Characteristics

Variables	Population	Survey Respondents	Staff Climate Survey 2002	Staff Climate Survey 2004
Gender				
Female	54.7%	67.1%	63.6%	63.3%
Male	45.2%	32.9%	36.4%	36.3%
Primary College or Division				
President's Office	1.9%	1.6%	2.5%	0.6%
Academic Affairs	48.4%	27.1%	21.7%	20.7%
Administration & Finance	22.2%	13.5%	14.6%	17.1%
University Advancement	6.6%	5.6%	8.3%	8.5%
Educational & Student Services	20.7%	33.5%	36.9%	41.5%
Other	n/a	18.7%	15.9%	11.6%

Characteristics of Survey Respondents

The majority of survey respondents were female (67.1.3%). Only 3.5% were new employees (that is, in their first year of their position). Less than 20% of the respondents were 29 years of age or younger, 24.4% were ages 30-39, 20% were ages 40-49, and 36% were 50 or older. More than half (65.1%) of the respondents had professional experience for 11 years or more. Other respondents had professional experience for 1 year or less (3.5%), 2 to 4 years (10.6%), 5 to 7 years (11%), or 8 to 10 years (9.8%). Only 10.2% of respondents were in the first year of their appointment at their current university.

Larger percentages of respondents had been employed by their current university for 2 to 4 years (22.4%), 5 to 7 years (11.8%), 8 to 10 years (15.4%), and 11 years or more (40.2%). With approximately 98.4% of the respondents having a bachelor's degree or higher, including 55.5% with graduate degrees, the respondents were relatively well educated. This level of education is not surprising given that assignments of professional and scientific employees in post-secondary institutions usually require either a baccalaureate degree or higher.

Respondents who had no administrative responsibilities were slightly more (50.8%) than those who had administrative duties (49.2%). Larger percentages of respondents were affiliated with the Educational Student Services division (33.5%), Academic Affairs (27.1%), Administrative and Finance (13.5%), University Advancement (5.6%), President’s Office (1.6%), and others (18.7%). In this last group some employees may have held multiple appointments across divisions. Demographic data are summarized in Table IV-4.

Table IV-4. Demographic Characteristics of Survey Respondents

Variables	Frequencies	Percent
Gender		
Female	169	67.1%
Male	83	32.9%
Age		
19 or less	0	0%
20 to 29	49	19.6%
30 to 39	61	24.4%
40-49	50	20.0%
50-59	67	26.8%
60 or more	23	9.2%
Education		
Less than HSD	0	0%
HSD/GED	4	1.6%
Associates degree	8	3.1%
Bachelors degree	101	39.8%
Graduate degree	141	55.5%
Primary College or Division		
President's Office	4	1.6%
Academic Affairs	68	27.1%
Administration & Finance	34	13.5%
University Advancement	14	5.6%
Educational & Student Services	84	33.5%
Other	47	18.7%
Years of Professional Experience		
1 or less	9	3.5%
2 to 4	27	10.6%
5 to 7	28	11%
8 to 10	25	9.8%
11 or more	166	65.1%
Years of Employment at university		
1 or less	26	10.2%
2 to 4	57	22.4%
5 to 7	30	11.8%
8 to 10	39	15.4%
11 or more	102	40.2%
Had Administrative Responsibilities		
Yes	125	49.2%
No	129	50.8%
Currently in Administrative Position		
Yes	96	37.9%
No	157	62.1%

Validation and Construction of the Instruments

The validity of the questionnaire, which was composed of three measures (i.e., empowerment, organizational support for innovation, and organizational trust), could be assured, because all items of the questionnaire for the study were derived from already established instruments as shown in Chapter III. As discussed in Chapter III, existing instruments were used to measure empowerment (Spreitzer, 1995), perceived organizational support for innovation (Scott & Bruce, 1994), and organizational trust (Bryan, 1995; Butler, 1991; Moorman et al., 1992; and Moye, 2003).

After collecting the data, an exploratory factor analysis was conducted to establish the construct validity of the measures for empowerment, organizational support for innovation, and organizational trust. A principal component analysis with varimax rotation was used to examine factor loadings. Since initial factor extraction does not give interpretable factors, rotation allows factors to be named and interpreted in a more meaningful way. Thus, the rotation enables one to make the large loadings larger than before and the small loadings smaller so that each variable is associated with a minimal number of components (SPSS Base 10.0 Applications Guide, 1999).

Table IV-5 shows the results of the factor analysis. Each construct was divided into sub-dimensions that showed an eigenvalue greater than one. How many dimensions would be extracted among variables was determined by the eigenvalue-greater-than-one rule. Eight components with an eigenvalue of greater than 1.0 were found and extracted; the screen plot also indicated eight components. Comrey (1973) suggested that loadings in excess of .71 are considered excellent, .63 very good, .55 good, .45 fair, and .32 poor. Thus, items with a factor loading less than .40 were deleted (Tabachnick & Fidell, 1989).

Table IV-5. Principal Component Analysis with Varimax Rotated

Item	Dimension	Factor Loadings							
		F1	F2	F3	F4	F5	F6	F7	F8
1	Mean	.006	.168	-.041	.159	**.802**	.130	.269	-.047
2	Mean	.059	.138	.055	.311	**.809**	.097	.292	-.010
3	Mean	.081	.144	.072	.263	**.821**	.079	.284	-.029
4	Comp	.010	.057	-.016	-.076	.270	.152	**.835**	.036
5	Comp	.061	.008	-.015	.126	.239	.065	**.834**	.169
6	Comp	-.024	-.081	.017	.120	.145	.163	**.812**	-.042
7	SDet	.165	.020	.118	**.811**	.213	.215	.062	.048
8	SDet	.192	.039	.087	**.837**	.223	.198	.085	.068
9	SDet	.144	.075	.133	**.826**	.160	.240	.034	.048
10	Impa	.157	.052	.013	.189	.197	**.796**	.155	-.041
11	Impa	.146	.108	.086	.261	.045	**.862**	.139	-.091
12	Impa	.157	.114	.109	.233	.042	**.886**	.138	-.038
13 *	SpInnov	.409	.223	.295	.568	.117	.084	.041	-.156
14	SpInnov	**.447**	.361	.296	.516	.073	.095	.031	-.104
15	SpInnov	**.540**	.211	.268	.400	.102	.128	.093	-.145
16	SpInnov	**.678**	.044	.011	.262	-.035	.173	-.084	-.038
17	SpInnov	**.685**	.264	.048	.344	-.229	.023	.139	.089
18	SpInnov	**.589**	.287	.385	.046	.165	.068	-.017	-.080
19	SpInnov	**.767**	.260	.154	.195	-.036	.016	.080	.066
20	SpInnov	**.794**	.194	.177	.114	-.043	.078	.043	.079
21	SpInnov	**.830**	.143	.098	.217	-.065	.037	-.015	.040
22	SpInnov	**.606**	.329	.475	.076	.214	.091	.058	-.107
23	SpInnov	**.552**	.251	.161	.006	.138	.149	-.069	.268
24	SpInnov	**.683**	-.114	.273	-.105	.237	.150	-.081	.051
25	SpInnov	**.685**	.245	.308	-.047	.231	.172	-.021	.015
26	ReSply	.392	.334	**.471**	.151	.142	.076	-.047	.041
27	ReSply	.251	.321	**.718**	.071	.070	.043	.027	.109
28	ReSply	.230	.080	**.730**	.183	.028	.066	-.059	.242
29 *	ReSply	.085	.120	.032	.075	-.050	-.099	.011	.817
30 *	ReSply	.019	.052	.125	-.051	-.018	-.039	.116	.792
31	ReSply	.254	.077	**.600**	.197	.040	.095	-.168	.227
32 *	SpInnov	.206	.294	.677	.107	-.055	.090	.066	-.095
33 *	SpInnov	.228	.303	.686	.062	-.082	-.066	.115	-.077
34	SpInnov	**.615**	.292	.275	.121	-.035	-.104	.150	.030

Table IV-5. (continued)

35	OrgTrust	-.026	**.563**	.248	-5.9E-5	.173	.178	-.135	-.062
36	OrgTrust	.148	**.771**	.044	-.029	.161	.030	-.014	.067
37	OrgTrust	.234	**.741**	.173	.142	.009	.019	.023	.005
38	OrgTrust	.250	**.545**	.204	.105	.182	-.024	.064	-.062
39	OrgTrust	.200	**.855**	.151	.101	-.029	.024	.021	.127
40	OrgTrust	.220	**.842**	.217	.108	-.042	.101	.029	.082
41	OrgTrust	.317	**.679**	.173	.028	.094	.052	.016	.147
	Eigenvalue	13.571	4.438	2.805	2.043	1.729	1.599	1.550	1.193
	Explained Variance (%)	33.099	10.825	6.841	4.984	4.218	3.901	3.781	2.910
	Cumulative Variance (%)	33.099	43.923	50.765	55.748	59.966	63.867	67.648	70.558

Note: *Omitted items

Component 1 consisted of 12 items representing Support for Innovation. Items ranging from .206 to .409 (items 13, 32, and 33) were deleted. Component 2 consisted of seven items representing Organizational Trust. Component 3 consisted of four items representing Resource Supply. Items ranging from .032 to .125 (items 29 and 30) were deleted. Empowerment was divided into the four components of meaning, competence, self-determination, and impact as suggested by Spreitzer (1995). Component 4 consisted of three items representing the self-determination component, component 5 consisted of four items representing the meaning component, component 6 consisted of three items representing the impact component, and component 7 consisted of three items representing the competence component of empowerment. Component 8 consisted of two items representing Resource Supply. These two items (items 29 thru 30) were loaded on a different factor from the other four intended Resource Supply items or were not supported by theory. In addition, component 8 had a low eigenvalue of 1.193. Thus, they were deleted from the scale.

In summary, eight factors were determined to test hypotheses through a principal components analysis with varimax rotation method: empowerment, organizational support for innovation, and organizational trust. One factor and five items were omitted because they showed low factor loading values or were not supported theoretically.

Reliability of the Instruments

Reliability analyses were performed to ensure appropriate levels of internal consistency for all measures. Previous studies examining psychometric properties of the instruments, for the most part, relied on an exploratory factor analysis and Cronbach's alpha to establish construct validity and reliability of the instruments. Using an exploratory factor analysis of the individual items in earlier studies, the dimensions of the instrument were analyzed to evaluate the construct validity of the measures. The use of an exploratory factor analysis in this study will provide an extension of those lines of research. All of the instruments for Empowerment, Organizational Support for Innovation, and Organizational Trust have exhibited acceptable levels of construct validity in each of the previous studies as shown in Chapter III.

Cronbach's coefficient alpha was calculated to assess the internal consistency of the instrument scales. Cronbach's coefficient alpha represents the mean reliability coefficient obtained from all possible split half correlations. Coefficient alphas were computed for each of the scales and subscales (Empowerment, Meaning, Competence, Self-Determination, Impact, Organizational Support for Innovation, Support for Innovation, Resources Supply, and Organizational Trust) using the Statistical Package for Social Sciences 16.0 program (see Table IV-6). According to Churchill (1979), low coefficient alphas indicate that the survey items perform poorly in capturing the construct that motivates the measure, while high coefficient alphas indicate that items in the survey instrument are highly correlated with true scores. Generally speaking, .70 is regarded as an acceptable level of reliability coefficient. However there is no universal agreement on

what constitutes an acceptable level of alpha (Schmitt, 1996). Reliability coefficients of .50 to .60 can be acceptable in basic research (Nunnally, 1967).

The reliability estimate for the slightly modified instrument based on the principal components analysis for the entire 36-item instrument was .94. The reliabilities on the individual scales of the survey instrument ranged from .83 (Resource Supply) to .94 (Organizational Support for Innovation). According to McMillan and Schumacher (1997), a coefficient of .90 indicates a highly reliable instrument, but coefficients ranging from .70 to .90 are acceptable for most instruments. Given that this study is exploratory in nature and that none of the reliability estimates fell below .70, the scale reliabilities were considered acceptable.

Table IV-6. Comparison of Reliabilities by Factors (Cronbach's Alpha)

Factors	Mean	Standard deviation	Cronbach's Alpha
Emp	4.04	0.59	.88
Mean	4.36	0.71	.93
Comp	4.36	0.59	.85
SDet	4.12	0.87	.93
Impa	3.32	1.04	.92
OrgInnov	3.19	0.73	.94
SpInnov	3.30	0.77	.93
ReSply	2.84	0.83	.83
OrgTrust	3.56	0.64	.89

Empowerment Measure Factor Analysis

Table IV-7 shows the results of the principal component analysis of empowerment items. The principal component analysis showed strong factors with high loadings. Four factors had eigenvalues greater than one. Factor 1 was made up of items intended to measure self-determination. Factor 2 was made up of items intended to measure meaning, and factor 3 contained the items to measure impact. Factor 4 was made up of items intended to measure competence. This result is consistent with previous

studies (Dee et al., 2003; Kirkman & Rosen, 1999; Moye, 2003; Spreitzer, 1995) showing that empowerment has four dimensions. In this study, the empowerment measure was defined by the four dimensions of meaning, competence, self-determination, and impact.

Table IV-7. Varimax Rotated Principal Component Analysis for Empowerment Measure (12 items)

Item	Dimension	Factor Loadings			
		F1	F2	F3	F4
1	Mean	.089	**.876**	.141	.209
2	Mean	.227	**.884**	.157	.229
3	Mean	.198	**.897**	.124	.226
4	Comp	-.042	.241	.118	**.876**
5	Comp	.140	.221	.062	**.868**
6	Comp	.134	.140	.107	**.824**
7	SDet	**.897**	.155	.188	.103
8	SDet	**.907**	.182	.191	.113
9	SDet	**.884**	.144	.248	.036
10	Impa	.151	.207	**.849**	.101
11	Impa	.226	.120	**.905**	.097
12	Impa	.239	.075	**.914**	.106
Eigenvalue		5.370	2.217	1.470	1.241
Explained Variance (%)		44.747	18.475	12.254	10.344
Cumulative Variance (%)		44.747	63.222	75.476	85.820

Organizational Support for Innovation Measure Factor Analysis

To determine the validity of support for innovation measure, a principal component analysis with varimax rotation was conducted using a criterion of two components (support for innovation and resource supply). Table IV-5 shows the results of the principal component analysis of survey measures. In the principal component factor analysis, five support for innovation items (13, 32, and 33) loaded on a different factor from the other 13 items. In addition, two resource supply items (29 and 30) loaded on a different factor from the other four items. Thus, they were deleted from the scale.

The remaining 17 items were reanalyzed. The second principal component analysis showed strong factors with high loadings. Two factors had eigenvalues greater than one. Factor 1 was made up of items intended to measure support for innovation. Factor 2 was made up of items intended to measure resource supply. This result is consistent with previous studies (Dee et al., 2003; Kirkman & Rosen, 1999; Moye, 2003; Spreitzer, 1995) in that empowerment has four Dimensions. In this study, the organizational support for innovation measure was defined by two dimensions: support for innovation and resource supply. Table IV-8 shows the results of the principal component analysis of Organizational Support for Innovation items.

Table IV-8. Varimax Rotated Principal Component Analysis for Organizational Support for Innovation Revised Measure (17 items)

Item	Dimension	Factor Loadings	
		F1	F2
1	Innov	**.600**	.423
2	Innov	**.610**	.407
3	Innov	**.750**	.014
4	Innov	**.792**	.153
5	Innov	**.549**	.530
6	Innov	**.783**	.315
7	Innov	**.769**	.313
8	Innov	**.841**	.223
9	Innov	**.578**	.613
10	Innov	**.572**	.298
11	Innov	**.495**	.384
12	Innov	**.585**	.508
13	ReSply	.340	**.710**
14	ReSply	.191	**.801**
15	ReSply	.154	**.806**
16	ReSply	.163	**.713**
17	Innov	**.635**	.354
Eigenvalue		8.679	1.508
Explained Variance (%)		51.050	8.871
Cumulative Variance (%)		51.050	59.922

Organizational Trust Measure Factor Analysis

Table IV-9 shows the results of the principal component analysis of organizational trust items. The principal component factor analysis showed only one factor with high factor loadings. The factor had an eigenvalue greater than one. Factor one was made up of all the items intended to measure organizational trust.

Table IV-9. Varimax Rotated Principal Component Analysis for Organizational Trust Measure (7 items)

Item	Dimension	Factor Loadings F1
1	OrgT	**.580**
2	OrgT	**.769**
3	OrgT	**.792**
4	OrgT	**.657**
5	OrgT	**.901**
6	OrgT	**.904**
7	OrgT	**.793**
	Eigenvalue	4.244
	Explained Variance (%)	60.631
	Cumulative Variance (%)	60.631

In sum, the principal component analysis was used to determine which items composed the scales measuring the hypothesized dimensions of empowerment, support for innovation, and organizational trust. The principal component analysis matched the hypothesized dimensions discussed in Chapter II.

Hypothesis Testing

Hypothesis 1

Hypothesis 1: An analysis of empowerment among employees will yield four cognitions of empowerment: meaning, competence, self-determination, and impact.

Hypothesis 1 was tested by performing an exploratory principal component analysis shown in Table IV-10. The analysis indicated that four dimensions of empowerment could be identified. All three items for self-determination loaded on factor one. All three items for meaning loaded on factor two. All three items for impact loaded on factor three. All three items for competence loaded on factor four. Thus, the results of the principal components analysis supported Hypothesis 1.

Table IV-10. Varimax Rotated Principal Component Analysis for Empowerment Measure (12 items)

Item	Dimension	Factor Loadings			
		F1	F2	F3	F4
1	Mean	.089	**.876**	.141	.209
2	Mean	.227	**.884**	.157	.229
3	Mean	.198	**.897**	.124	.226
4	Comp	-.042	.241	.118	**.876**
5	Comp	.140	.221	.062	**.868**
6	Comp	.134	.140	.107	**.824**
7	SDet	**.897**	.155	.188	.103
8	SDet	**.907**	.182	.191	.113
9	SDet	**.884**	.144	.248	.036
10	Impa	.151	.207	**.849**	.101
11	Impa	.226	.120	**.905**	.097
12	Impa	.239	.075	**.914**	.106
	Eigenvalue	5.370	2.217	1.470	1.241
	Explained Variance (%)	44.747	18.475	12.254	10.344
	Cumulative Variance (%)	44.747	63.222	75.476	85.820

Hypothesis 2

Hypothesis 2: Higher levels of perceived organizational support for innovation will be positively associated with empowerment.

In order to examine the relationship between organizational support for innovation and empowerment, an OLS regression equation was estimated. Given organizational support for innovation was hypothesized to be associated with empowerment, organizational support for innovation was regressed on empowerment. A single regression equation (Table IV-11) was used for testing the overall model fit. Table IV-12 shows the results of the regression equation. The model indicated that organizational support for innovation was a significant predictor of empowerment ($p < .001$) and accounted for 17% of the variance in empowerment. This supports Hypothesis 2 in that higher levels of perceived organizational support for innovation are positively associated with higher levels of empowerment.

Table IV-11. Regression Model for Hypothesis 2

$Emp = \beta_1 (OrgInnov)$

Table IV-12. Contribution of Organizational Support for Innovation to Empowerment

Dependent Variable	Independent Variable	β	P
Emp $R^2 = .175$ Adj $R^2 = .171$ P = .000*	OrgInnov	.418	.000*

Note: * is significant at ≤ .05.

Hypothesis 3

Hypothesis 3: Higher levels of organizational trust will be positively associated with empowerment.

The relationship between organizational trust and empowerment was examined with an OLS regression equation. Given that organizational trust was hypothesized to be positively associated with empowerment, organizational trust was regressed on

empowerment. A single regression equation (Table IV-13) was used for testing the overall model fit. Table IV-14 shows the results of the regression that indicated that organizational trust was a significant predictor of empowerment ($p < .001$), accounting for 7% of the variance in empowerment. This supports Hypothesis 3 in that higher levels of organizational trust were positively associated with higher levels of empowerment.

Table IV-13. Regression Model for Hypothesis 3

$Emp = \beta_1 (OrgT)$

Table IV-14. Contribution of Organizational Trust to Empowerment

Dependent Variable	Independent Variable	β	P
Emp $R^2 = .072$ Adj $R^2 = .068$ P = .000*	OrgT	.268	.000*

Note: * is significant at ≤ .05.

Hypothesis 4

Hypothesis 4: Higher levels of organizational trust will be positively associated with perceived organizational support for innovation.

The relationship between organizational trust and organizational support for innovation was examined with an OLS regression equation. Given that organizational trust was hypothesized to be positively associated with organizational support for innovation, organizational trust was regressed on organizational support for innovation. A single regression equation (Table IV-15) was used for testing the overall model fit. Table IV-16 shows the results of the regression indicating that organizational trust was a significant predictor of empowerment ($p < .001$), accounting for 37% of the variance in organizational support for innovation. This supports Hypothesis 3 in that higher levels of

organizational trust were positively associated with higher levels of perceived organizational support for innovation.

Table IV-15. Regression Model for Hypothesis 4

OrgInnov = β_1 (OrgT)

Table IV-16. Contribution of Organizational Trust to Empowerment

Dependent Variable	Independent Variable	β	P
OrgInnov R^2 = .371 Adj R^2 = .368 P = .000*	OrgT	.609	.000*

Note: * is significant at ≤ .05.

Hypothesis 5

Hypothesis 5: The relationship between employee's perceptions of empowerment and perceived organizational support for innovation will be affected by organizational trust.

To test for interaction effects on empowerment by organizational trust, a regression equation was developed in which independent variables included perceived support for innovation, organizational trust, and a variable representing the interaction between perceived support for innovation and organizational trust. The regression equation was shown in Table IV-17.

When Organizational Support for Innovation and Organizational Trust and their interaction term were entered together, 17% of the variance was accounted for in empowerment ($p < .001$) as shown in Table IV-18. There was a main effect of Organizational Support for Innovation on Empowerment. Employees who perceived

higher levels of organizational support for innovation had higher levels of perceived empowerment.

However, perceived organizational support for innovation had no significant interaction with organizational trust. The absence of significant interaction effects indicated that there was no difference by organizational trust with regard to the relationship between employee's perceptions of empowerment and perceived organizational support for innovation. These results did not support Hypothesis 5.

Table IV-17. Regression Model for Hypothesis 5

$Emp = \beta_1 (OrgInnov) + \beta_2 (OrgTrust) + \beta_3 (OrgInnov*OrgTrust)$

Table IV-18. Contribution of Organizational Support for Innovation and Organizational Trust to Empowerment

Dependent Variable	Independent Variable	β	P
Emp	OrgInnov	.390	.000*
$R^2 = .172$	OrgTrust	.053	.494
Adj $R^2 = .161$	OrgInnov *OrgTrust	.066	.298
P = .000*			

Note: * is significant at ≤ .05.

Hypothesis 6

Hypothesis 6: The relationship between employees' perceptions of empowerment and perceived organizational support will be affected by the demographic variables of age, gender, level of education, work division, years in the current university, years of professional experience, and administrative experience.

The influence of the demographic variables on the relationship between employee's perceptions of empowerment and perceived organizational support was

explored by running an OLS regression equation. Given that perceived organizational support was hypothesized to be associated with empowerment, perceived organizational support along with the demographic variables and the interaction variables were regressed on empowerment (see Table IV-19 and Table IV-20).

Table IV-19. Regression Model for Hypothesis 6

$Emp = \beta_1 (OrgInnov) + \beta_2 (Age) + \beta_2 (Gender) + \beta_3 (Edu) + \beta_4 (Dept) + \beta_5 (YrEmp) + \beta_6 (YrExp) + \beta_7 (AdResp) + \beta_8 (AdPos) + \beta_9 (OrgInnov * Age) + \beta_{10} (OrgInnov * Gender) + \beta_{11} (OrgInnov * Edu) + \beta_{12} (OrgInnov * Dept) + \beta_{13} (OrgInnov * YrEmp) + \beta_{14} (OrgInnov * YrExp) + \beta_{15} (OrgInnov * AdResp) + \beta_{16} (OrgInnov * AdPos)$

Table IV-20. Contribution of Independent Variable(s) to Empowerment

Dependent Variable	Independent Variable	β	P
Emp	OrgInnov	-.027	.957
$R^2 = .420$	Age	.147	.079
Adj $R^2 = .372$	Gender	.021	.695
P = .000*	Edu	.053	.356
	Dept	-.012	.844
	YrEmp	.062	.423
	YrExp	.147	.087
	AdResp	.211	.022*
	AdPos	.021	.813
	OrgInnov *Age	-.317	.120
	OrgInnov *Gender	.053	.412
	OrgInnov *Edu	.561	.171
	OrgInnov *Dept	.052	.755
	OrgInnov *YrEmp	-.062	.666
	OrgInnov *YrExp	.236	.387
	OrgInnov *AdResp	-.269	.015*
	OrgInnov *AdPos	.183	.054

Note: * is significant at ≤ .05.

When these variables and their interaction terms were entered together, 42% of the variance was accounted for in Empowerment ($p < .001$). There was a main effect of

Administrative Responsibility on Empowerment in that employees with more administrative responsibility had higher perceived levels of empowerment.

A significant interaction effect was found between Administrative Responsibilities and Organizational Support for Innovation on the levels of empowerment. Employees with lower levels of perceived organizational support for innovation that did not have administrative responsibilities had lower levels of empowerment than those with administrative responsibilities. In addition, employees with higher perceived levels of organizational support for innovation that had administrative responsibilities had higher levels of empowerment (see Figure IV-1). Table IV-21 shows a summary of hypothesized findings.

Figure IV-1. The Interaction Effects of Empowerment by Administrative Responsibilities and Organizational Support for Innovation

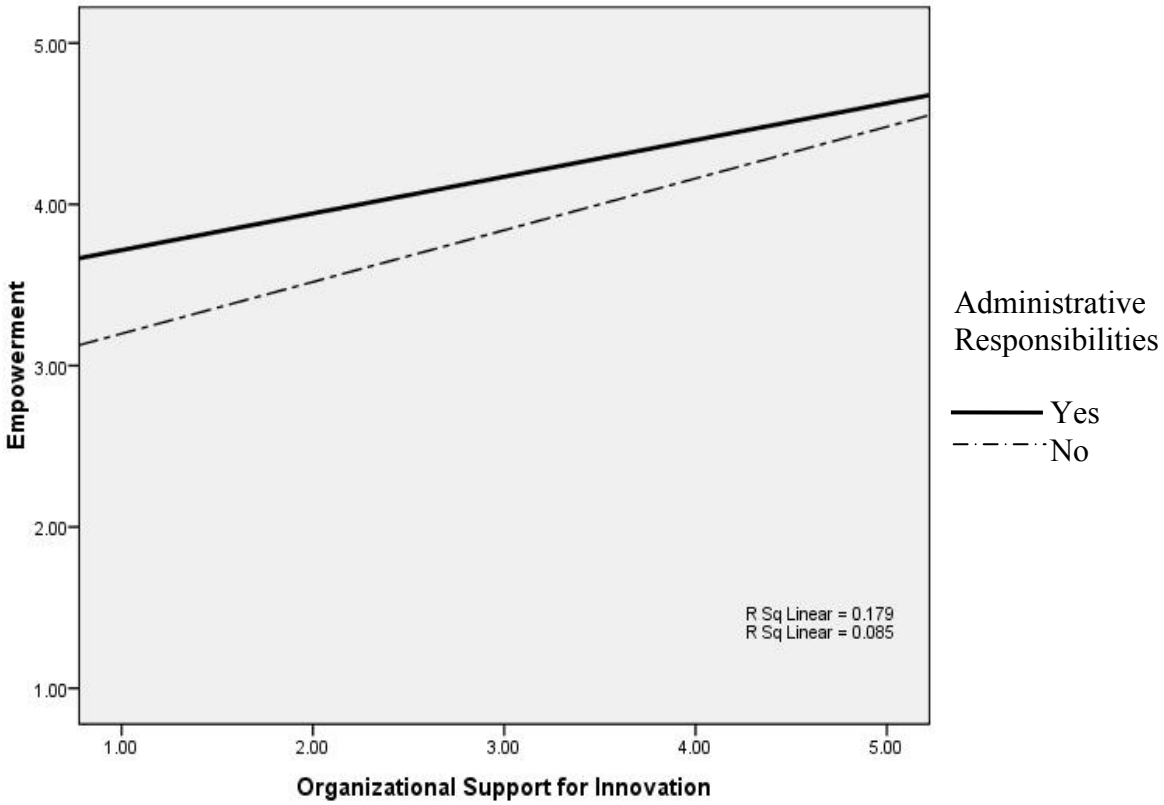


Table IV-21. Summary of Hypothesized Findings

H1	An analysis of empowerment among employees will yield four cognitions of empowerment: meaning, competence, self-determination, and impact.	Supported
H2	Higher levels of perceived organizational support for innovation will be positively associated with empowerment.	Supported
H3	Higher levels of organizational trust will be positively associated with empowerment.	Supported
H4	Higher levels of organizational trust will be positively associated with perceived organizational support for innovation.	Supported
H5	The relationship between employee's perceptions of empowerment and perceived organizational support will be affected by organizational trust.	Partly Supported
H6	The relationship between employee's perceptions of empowerment and perceived organizational support will be affected by the demographic variables of age, gender, level of education, work division, years in the current university, years of professional experience, and administrative experience.	Partly Supported

Path Analysis

Pedhazur (1997) argued that, "path analysis is intended *not* to discover causes but to shed light on the tenability of the causal models a researcher formulates based on knowledge and theoretical considerations" (pp. 669-670). In addition to an examination of the direct effects of the independent variables on a dependent variable, indirect and total effects should also be considered. Indirect effects are calculated by multiplying the path coefficients between the dependent variable and each independent variable. The direct and indirect effect coefficients are additive; thus, the total effects are the sum of the direct and indirect effects. Total effects are sometimes used for ranking the importance of a variable in terms of explaining the variance in a dependent variable (Pedhazur, 1997).

Path analysis was used to determine the effects of Organizational Support for Innovation and Organizational Trust on Empowerment. The demographic variables of age, gender, level of education, work division, years in the current university, years of

professional experience, and administrative experience, along with Organizational Trust, were used as independent variables, while Organizational Support for Innovation was the intervening variable in the model. Empowerment was the dependent variable for the first path analysis and System-level Trust was the dependent variable for the second.

It should be noted that path analysis assumes that all variables are measured on an interval scale (Pedhazur, 1997), although ordinal variables with at least five categories may be acceptable (Streiner, 2005). Each of the ordinal variables included (age, years in the current university, and years of professional experience) met the requirement of having at least five categories.

Structural equation modeling (SEM) using the AMOS 18 program was applied to test the effects of Organizational Trust on Organizational Support for Innovation and Empowerment, and to determine the influences of the intervening variable (Organizational Support for Innovation) on Empowerment. Table IV-22 shows the results of the path analysis. Figure IV-1 makes it easier to interpret the complex relationship among the many variables intuitively.

Age had positive a positive direct effect on Organizational Support for Innovation and a positive indirect effect on Empowerment. Those individuals who were older perceived more organizational support for innovation and more empowerment than did younger employees. In addition, age enhanced Organizational Support for Innovation, which in turn yielded higher levels of Empowerment (see Table IV-22). Administrative Responsibilities had a positive direct effect on Organizational Support for Innovation and a positive indirect effect on Empowerment. Employees who currently or previously had administrative responsibilities perceived more organizational support for innovation than those who did not have administrative responsibilities. Administrative Responsibilities enhanced levels of perceived organizational support for innovation, which subsequently yielded higher levels of perceived empowerment.

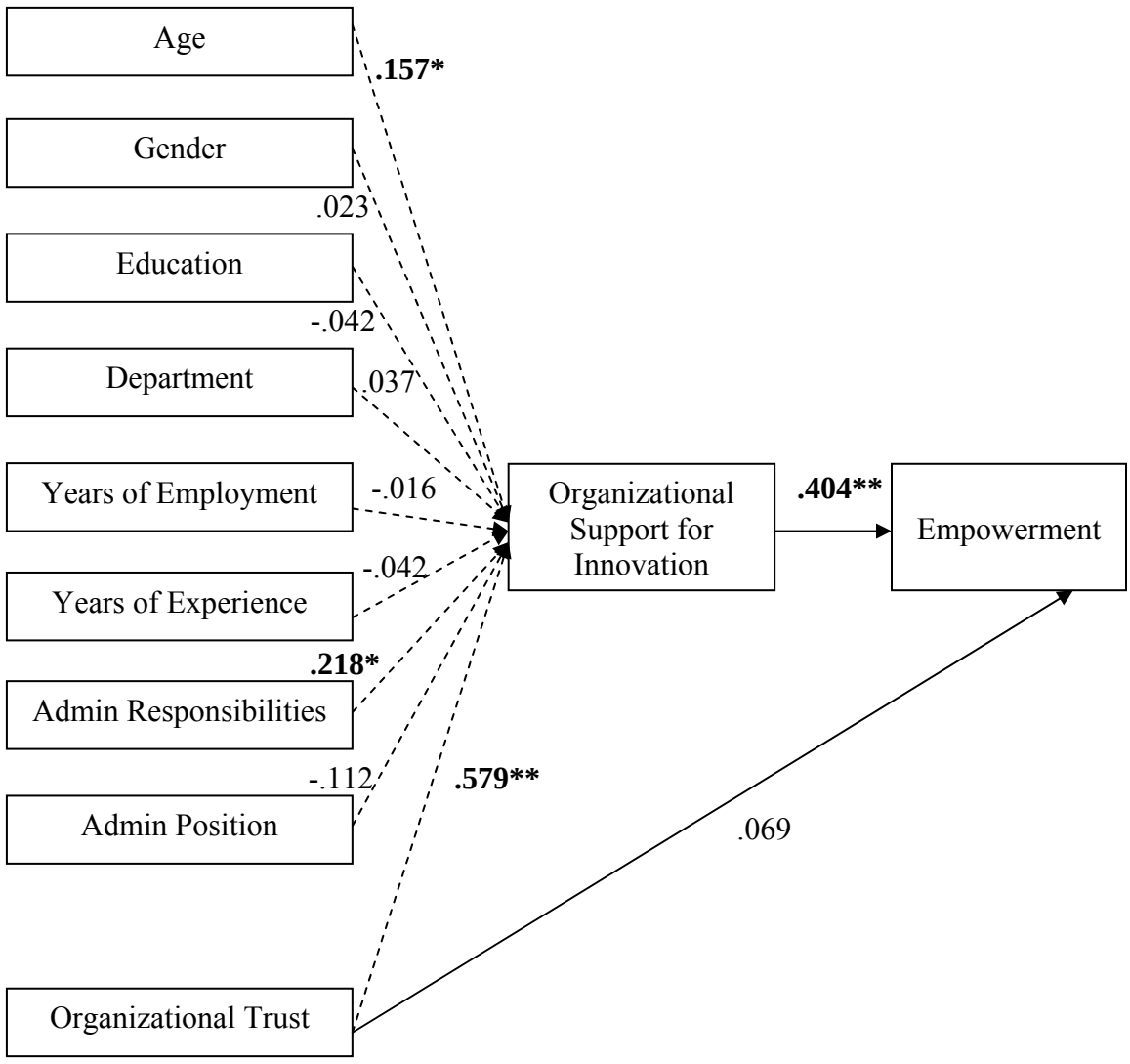
Perceived Organizational Trust had a positive direct effect on Organizational Support for Innovation and a positive indirect effect on Empowerment. Employees with higher levels of perceived Organizational Trust had higher levels of perceived Organizational Support for Innovation. Higher levels of Organizational Trust enhanced perceived Organizational Support for Innovation, which subsequently yielded higher levels of Empowerment. Organizational Support for Innovation had a positive direct effect on Empowerment. Individuals with higher levels of perceived Organizational Support for Innovation had higher levels of Empowerment.

Table IV-22. Path Analysis Results for Empowerment: Standardized Coefficients and P-values

Variables	Org Innov	Empowerment		
	Direct Effect	Direct Effect	Indirect Effect	Total Effect
Age	.157* (.041)	.000	.064* (.032)	.064* (.032)
Gender	.023 (.662)	.000	.009 (.626)	.009 (.626)
Edu	-.042 (.407)	.000	-.017 (.362)	-.017 (.362)
Dept	.037 (.496)	.000	.015 (.468)	.015 (.468)
YrExp	-.042 (.578)	.000	-.017 (.544)	-.017 (.544)
YrEmp	-.016 (.849)	.000	-.006 (.826)	-.006 (.826)
Ad Resp	.218* (.040)	.000	.088* (.032)	.088* (.032)
AdPos	-.112 (.277)	.000	-.045 (.242)	-.045 (.242)
OrgTrust	.579** (.001)	.069 (.669)	.234** (.001)	.303** (.001)
OrgInnov	.000	.404** (.001)		.404** (.001)

Note: * $p < .05$; ** $p < .01$

Figure IV-2. Path Model of Empowerment



CHAPTER V

DISCUSSION

The purpose of this study was to investigate the relationships between the levels of empowerment and perceived organizational support for innovations and organizational trust among non-academic professional staff within a public comprehensive university in a Midwestern state. More specifically, the study examined how the extent to which the organization values its employees' contributions and cares about their well-being (i.e., provides organizational support) influences their perceptions of empowerment. In addition, the study tested the hypotheses that organizational trust may affect perceived employee empowerment and influence the relationship between perceived organizational support for innovation and employee empowerment.

To aid in the examination of the relationship between perceived employee empowerment and organizational support for innovation, a conceptual framework for the constructs empowerment and commitment was developed. The conceptual framework based on the work of Thomas and Velthouse (1990) and Spreitzer (1992, 1995) was used to define empowerment. The conceptual framework based on the work of Siegel and Kaemmerer (1978) was used to define organizational support for innovation.

Empowerment

In this study, empowerment refers to the individual beliefs of employees about their role in relation to the organization (Bandura, 1989; Spreitzer, 1995). At the individual level of analysis, empowerment is characterized as an enabling process (Conger & Kanungo, 1988). It has been conceptualized that when employees feel empowered at work, they experience four dimensions: (a) a fit between the needs of their work role and their beliefs, values, and behaviors; (b) a sense of belief in their capacity to perform activities with skill; (c) the feeling of having control over their work; and (d) the belief that they have significant influence over strategic, administrative, or operational outcomes at work. Collectively, these four cognitions reflect employees' active

orientation to their work and how they feel about their work role and context (Spreitzer, 1995). In other words, employees feel in control and perceive that they are capable of shaping their work role and context. In addition, empowerment is defined as a continuous variable in which employees can feel different degrees of empowerment (Spreitzer, 1995).

Employee empowerment results from the internalization of a framework that is grounded in personal meaning and is responsive to the larger aims of the organization. Empowered employees, thus, are likely to be more adaptive because of the increased flexibility that accompanies empowerment (Scott & Bruce, 1994), enabling organizations to be more flexible and responsive (Bowen & Lawler, 1992; Conger & Kanungo, 1988). An empowered workforce is more likely to perform at higher levels (Thomas & Velthouse, 1990).

Support for Innovation

This study utilizes Damanpour's (1991) definition of innovation. Innovation is defined in this study as adoption of an internally generated or purchased device, system, policy, program, process, product, or service that is new to the adopting organization (Damanpour, 1991). Aiken and Hage (1971) suggested that organizations adopt innovations continually over time. Organizations that are innovative are often characterized by an orientation toward creativity and innovative change. The success of institutional change efforts may depend on the extent to which organizational members perceive their organizational climate as supportive of innovation, change, and risk-taking behaviors (Basadur, 1995; Siegel & Kaemmerer, 1978).

Organizational Climate

Organizational climate, in this study, is defined as the current, common patterns of important dimensions of organizational life such as organizational policies, practices, and procedures (Kopelman et al., 1990) or its members' perceptions of and attitudes toward them (Peterson & White, 1992). Such work environments provide employees with the support needed for them to act on their perception of meaning, self-determination,

competency, and impact, the four basic motivational constructs suggested by Spreitzer (1995).

The review of the literature in Chapter II pointed to problems of limited research examining the relationship between employee empowerment and organizational support for innovation. Limited research to date has examined the empirical relationship among employees' perceptions of support for innovation, organizational trust, and structural and psychological empowerment. Research studies that specifically examine the relationship between organizational support and employee empowerment have been limited (Gomez & Rosen, 2001; Oreg, 2006).

The review of the literature also raised the need to further expand the knowledge base regarding employee empowerment in higher education, specifically concerning non-academic professional staff in higher education (Smerek & Peterson, 2007). Non-academic professional staff members who are responsible for the day-to-day operations of a university are recognized as key components of today's higher education. Several studies have found important differences between administrator and faculty perceptions of their institutions (Austin & Gamson, 1983; Bowen & Schuster, 1986; Peterson & White, 1992). Surprisingly, non-academic professional employees in higher education continue to receive little attention in the scholarly literature. This study aimed to expand the knowledge base regarding empowerment as it relates to non-academic professional staff in higher education.

In summary, implicit in the empowerment literature is an assumed relationship between employee empowerment and organizational support for innovation. This fundamental assumption was examined to contribute to the development of empowerment constructs and enable better understanding of what influences employees' perceptions of an innovative organizational climate and practitioners' and managers' awareness of empowerment as an effective and beneficial management tool. This study provides a rigorous statistical examination of the relationship between employee

empowerment and organizational support for innovation. Furthermore, the study tested the hypotheses that organizational trust may affect employee empowerment and influence the relationship between perceived organizational support for innovation and employee empowerment.

Discussion of Results

To examine the relationship between employee empowerment and organizational support for innovation, six hypotheses were suggested to analyze the association of employee empowerment and perceived organizational support for innovations and organizational trust. To summarize, the following hypotheses were proposed and examined in this study:

Hypothesis 1: An analysis of empowerment among employees will yield four cognitions of empowerment: meaning, competence, self-determination, and impact.

Decision: Supported

Hypothesis 2: Higher levels of perceived organizational support for innovation will be positively associated with empowerment.

Decision: Supported

Hypothesis 3: Higher levels of organizational trust will be positively associated with empowerment.

Decision: Supported

Hypothesis 4: Higher levels of organizational trust will be positively associated with perceived organizational support for innovation.

Decision: Supported

Hypothesis 5: The relationship between employee's perceptions of empowerment and perceived organizational support will be affected by organizational trust.

Decision: Partly Supported

Hypothesis 6: The relationship between employees' perceptions of empowerment and perceived organizational support will be affected by the demographic variables of

age, gender, level of education, work division, years in the current university, years of professional experience, and administrative experience.

Decision: Partly Supported

Overall, there is substantial evidence supporting a relationship between empowerment and the four dimensions. It was hypothesized that when employees feel empowered at work, they experience all four psychological states. In the study, the analysis of empowerment among non-academic professional employees yielded four distinct cognitions of empowerment: meaning, competence, self-determination, and impact as predicted, supporting the notion that empowerment is the "gestalt" of the four dimensions (Spreitzer, 2007).

The findings provided baseline data related to employee empowerment in non-academic professional employees in higher education. Perceived organizational support for innovation was a significant predictor of employees' perceived empowerment among non-academic employees from a single state comprehensive university in a Midwestern state. Non-academic professional employees who reported higher levels of perceived organizational support for innovation perceived higher levels of empowerment.

The study's findings indicate the influence of organizational trust on empowerment. These findings confirm the previous work by Chan et al. (2008), and Faulkner and Laschinger (2008) that trust is important for individuals to experience empowerment at work. Employees experience more empowerment when they perceive that their leaders are trustworthy (Spreitzer, 2007). The current research also provides evidence indicating that organizational trust is positively related to perceived support for the organization (Tan & Tan, 2000). Supportive climates are characterized by high levels of trust (Anderson & West, 1998; Mathisen & Einarsen, 2004). Organizational trust, thus, is likely to enhance employees' feelings of support for innovation.

Theoretical Implications

The purpose of the current study was to expand the theoretical knowledge base of empowerment. The study examined the relationship between organizational support for innovation and psychological empowerment. Two theoretical implications are proposed for future research.

First is the examination of the relationship between employee empowerment and organizational support for innovation. The correlation results support a positive relationship between perceived psychological empowerment and perceived organizational support for innovation among non-academic professional staff within a public comprehensive university in a Midwestern state. The results confirm Thomas and Velthouse's (1990) psychological perspective on empowerment, which suggests that organizational environments can have a strong influence on empowerment because employees' judgments about the observable organizational conditions are shaped by their interpretations.

Researchers suggested that empowerment may offer the potential to positively influence outcomes that benefit both individuals and organizations (Liden et al., 2000). Empowered employees feel in control and perceive that they are capable of shaping their work role and context (Spreitzer, 2007). Given that empowered individuals feel increased self-efficacy, which is a determinant of innovative behaviors in workers, and that previous research has demonstrated that perceptions of empowerment enhance the value of work for individuals, increased job satisfaction, and contributions to work productivity, the study provides further evidence to support the associations between employee empowerment and organizational support for innovation.

Second, the findings provide empirical evidence and validate the concepts of psychological empowerment (Spreitzer, 1992, 1995, Thomas & Velthouse, 1990) and organizational support for innovation (Siegel & Kaemmerer, 1978) in higher education settings. The study also provides important contributions to the literature, especially new

empirical evidence to support the psychological empowerment theory and organizational support theory in the context of U.S. higher education, specifically focusing on non-academic professional employees. The study's findings suggest that dimensions of empowerment appear to have significant positive relationships with the concept of organizational support for innovation. Previous research suggested that employees may experience more empowerment in supportive organizational environments (Siegel & Kaemmerer, 1978; Spreitzer, 2007), and this study contributes to this body of work. Thus, the current research supports development of an overall empowerment theory. Application of similar elements of research design contributes to the systematic expansion of a theoretical knowledge base of empowerment.

In addition, the results of the current study contribute to the body of knowledge regarding the influence of administrative responsibilities on empowerment. The findings show that employees who had or currently have administrative responsibilities are associated with higher levels of perceived empowerment. Feelings of being valued often develop when individuals are given administrative duties. Administrative responsibilities may impact individual's perceptions related to organizational innovation and empowerment. Individuals may be more likely to perceive higher levels of empowerment when they identify with, feel valued by, and are committed to the organization.

Implications for Management Practices

This study sheds some light on the effective management of non-academic professional employees in higher education in general. Higher education is an "enterprise of human beings" (Liebmann, 1986, p. 14) where technology and service delivery are primarily driven by human resources (Jensen, 2006). Thus, an innovative organizational climate that maximizes the potential of its members may become important to the long-term survival of colleges and universities in today's increasingly competitive environment (Jensen, 2006; Scott & Bruce, 1994). The current study contributes to the following management practices in higher education.

First, study findings suggest that there is a significant positive relationship between organizational support for innovation and employee empowerment. Previous studies have shown that employees working in supportive organizational environments demonstrate a higher level of job satisfaction, motivation, activity, and organizational commitment; they are also more excited about the importance of their work and willing to take risks needed for change (Dee et al., 2002; Jansen & Chandler, 1994; Orpen, 1990; Pierce & Delbecq, 1977; Tesluk, Farr, & Klein, 1997). Empowerment, thus, was considered to be a powerful mechanism for increasing employee involvement (Lawler, 1986) and for motivating task accomplishment (Conger & Kanungo, 1988).

Consistent with the findings by Knight and Trowler (2001), the study further supported that principles of empowerment are applicable to non-academic professional staff members in higher education. Knight and Trowler (2001) suggested that there is no reason why the principles that apply to relationships with academic staff should not apply to non-academic professional staff members. Management in higher education may consider applying the principles of empowerment to incorporate non-academic professional staff in decisions where they can feel in control and perceive that they are capable of shaping their work role and context (Spreitzer, 2007). The increased discretion and flexibility experienced by empowerment may enable the empowered employees to feel better about their jobs, reduce the stress they feel in performing their jobs, increase their confidence in performing job-related tasks, and increase their ability to adapt to changing conditions they encounter.

Non-academic professional staff members are key components in today's higher education (Smerek & Peterson, 2007). Empowerment may encourage them to raise awareness of best practices and help improve the overall quality of the entire university. Empowering employees to reflect on their jobs can spur individual thought and inquiry. Staff appraisals through the process of empowerment can provide opportunities to

celebrate efficiencies that have been achieved and to talk through areas that remain problematic (Knight & Trowler, 2001).

Second, study findings also suggest that the relationship between employee's perceptions of empowerment and perceived organizational support for innovation is affected by organizational trust. Trust is recognized as a critical component in well-functioning organizations (Tschannen-Moran & Hoy, 2000). Trust matters for empowerment. Employees' feeling of psychological empowerment is affected by perception of a supportive work climate that is characterized by trust (Corsun & Enz, 1999). Therefore, a climate of trust is an essential element of empowerment. Organizational trust may reduce defensive postures among employees inherent in any significant organizational change effort, thus resulting in increased perceptions of empowerment (Spreitzer, Noble, Mishra, & Cooke, 1999). Without trust, even well-intended empowerment efforts could fail because employees might not risk disclosure of feelings, opinions, and attitudes (Mishra & Morrissey, 1990).

Empowering structures and practices, including organizational trust, are recognized as contextual variables affecting employee feelings of empowerment (Seibert et al., 2004). These feelings of control may, in turn, lead employees to have higher levels of trust in the organizational systems. Employees act in anticipation of a successful future endeavor to the extent to which necessary impersonal structures are in place (McKnight, Cummings, & Chervany, 1998). If managers create work environments that enhance feelings of organizational trust, employees are more likely to perceive high levels of empowerment (McKnight & Chervany, 1996). For example, higher education administrators may consider building policies and processes that further protect employees' interests (e.g., grievance procedures, sexual harassment policies) as well as structural safeguards characterized by high levels of organizational trust in which inevitable failures of experimentation are tolerated without the fear of negative outcomes. Kanter (1977, 1993) argued that people react rationally to the organizational structures.

Organizational trust, therefore, provides concrete structural safeguards, including regulations, guarantees, and legal recourse to individuals in the organization (Shapiro, 1987).

Empowerment is "about risk taking. . . [about] trusting people" (Quinn & Spreitzer, 1997, p. 38). Examination of the mediating role of organizational trust helps to understand the process through which organizational climate influences organizational members' feeling of empowerment. In the fragmented, decentralized systems of work environment in higher education, where frequent direct observation of personnel is generally impractical and is coupled with limited connections between coworkers, the trust factor may become even more important. Such environment enables employees to gain greater insight into the impact of their efforts on the overall achievement of organizational goals (Chan, Taylor, & Markham et al., 2008).

Recommendations for Future Research

Results of the current study suggest a relationship between organizational support for innovation and employee empowerment. Further empirical examination of the empowerment construct will advance effective management interventions based on solid theory. The following recommendations present ideas for expansion of theoretical knowledge about employee empowerment.

First, this study provides baseline data related to organizational support for innovation and employee empowerment in higher education settings. The body of empowerment research related to non-academic professional employees in higher education continues to be limited in scope. Findings may be extended through research related to non-academic professional employees in other higher education settings. Replication of this study with other types of postsecondary organizations, such as community colleges, private colleges, and large research universities, may provide useful comparative data and extend the generalizability of findings. For example, community colleges have been considered as one of the most innovative sectors of higher education

(Roark, 1985). It would be interesting to investigate the perceived levels of organizational support and psychological empowerment, and their associations among non-academic professional staff in community colleges.

Second, the instrument was presented in a descriptive web survey, asking participants for their perceptions. The measurement requested information about individuals' perceptions and depended on participants' interpretations. Self-reports of work perceptions do not necessarily provide objective data, in contrast with data derived from organizational records (Price & Mueller, 1986). Another limitation involves a general characteristic of voluntary, self-report surveys. Employees who have low levels of trust in an institution, for example, may be less inclined to participate in this kind of study. Employees who fear retribution for stating negative opinions and mistrust the motives of the administration also may feel uncomfortable completing the survey. Under such circumstances, the sample could be skewed in the direction of respondents who have relatively high levels of trust in the organization and may negatively affect the generalizability of results of the study. Acknowledgement of the limitations of this study suggests methodological considerations for future research. Future research would benefit from a simultaneous alternate means of measurement to provide independent measurement.

Third, generalizing findings from the current study to other populations of non-academic professional employees is inappropriate. The study participants, a sample drawn from a public state university in a Midwestern state, are not representative of all non-academic professional employees across the United States. Future research should employ samples drawn from broader, more diverse populations to facilitate generalization to the universe of non-academic professional employees in higher education.

The fourth recommendation for future research is inclusion of structural empowerment in future empowerment studies. Past researchers included few structural

characteristics in their studies. Examination of structural empowerment may expand the knowledge of structural influences on employee empowerment. Structural empowerment and psychological empowerment are two distinct constructs (Knol & Van Linge, 2009; Seibert et al., 2004; Spreitzer, 2007; Zimmerman, 1995). According to Seibert et al. (2004), structural empowerment refers to a work environment whereas psychological empowerment refers to an internal psychological state.

Structural empowerment incorporates a framework, policies, and other determinants that influence behavior in an organization and focuses on the contextual conditions that enable empowerment in the workplace. Employees with sufficient structural empowerment are able to fulfill the tasks the organization requires of them.

Structural empowerment is viewed as a power-sharing process through the delegation of responsibility throughout the organizational chain of command (Spreitzer, 2007). Kanter (1993) identified four structural conditions that are the key factors contributing to empowerment: (a) opportunities for advancement or opportunity to be involved in activities beyond one's job description, (b) access to information about all facets of the organization, (c) access to support for one's job responsibilities and decision making, and (d) access to resources as needed by the employee (Kanter, 1993).

Spreitzer (2007) argued that employees, including those who are at low levels of the organizational hierarchy, can be empowered if they have access to these structural factors. The levels of empowerment in the workplace, therefore, depend on the presence of structural conditions in the environment, with employees' behavior seen as a response to those structural conditions (Manojlovich, 2007). An organization maximizes effectiveness and success when these structural conditions are available to all employees across all organization levels (Kanter, 1993). Quinn and Spreitzer (1997) pointed out that managers can empower employees by (a) sharing information about the organization; (b) providing an organizational structure with a clear vision, organizational goals, and identifiable individual roles; (c) developing a team-based alternative to hierarchy that is

capable of providing guidance, encouragement, and support, (d) offering relevant training opportunities, and (e) rewarding employees for the risks and initiatives they are expected to take. The researchers suggested that all of these practices are part of the empowerment process.

Finally, the data were collected in the context of a budget reduction crisis. Events outside of the study may have affected participants' responses to experimental procedures. Participants were concerned about possible layoffs or furloughs. Often, large-scale events, such as natural disaster, political change, or budget crisis, may affect participants' attitudes and behaviors such that it may become impossible to determine whether any change on the dependent measures is due to the independent variable or to the historical or ongoing event. Collection of data from a less stressful period would assist in establishing further knowledge about organizational support and psychological empowerment.

Conclusion

In summary, implicit in the empowerment literature is an assumed relationship between employee empowerment and organizational support for innovation. This study has answered the call by researchers (Oreg, 2006, Peterson & Speer, 2000, Smerek & Peterson, 2007) for more studies that examine the relationships between employee empowerment and perceived support for innovation and organizational trust. This foundational conceptual model was examined to contribute to the development of the overall empowerment constructs and enable better understanding of related individual perceptions, more specifically, between empowerment and perceived organizational support for innovations, and organizational trust.

This study also has notable implications for leaders in higher education settings, especially presidents, deans, department heads, and other executive level staff. Non-academic professional employees in higher education have received little attention in the scholarly literature. The current study advances the knowledge base regarding

empowerment as it relates to this specific group of professional employees in higher education. Knowing that the success of empowerment initiatives may depend on the extent to which organizational members feel valued and affirmed (Spreitzer, 2007), which requires an organizational climate that they perceive as supportive of innovation, change, and risk-taking behaviors (Siegel & Kaemmerer, 1978), administrators in higher education can maximize their organizational strategies by acquiring internal mechanisms that can stimulate and encourage new ideas for innovation proposal, adoption, and implementation to occur.

Organizations that value innovation and creativity among their members are more vigilant in turbulent environments. This is especially important in today's environment when the 21st century has brought with it profound challenges to the nature, values, and control of higher education in the United States. As demand for college continues to grow in the next decade, institutions of higher education must search for innovative ways to meet the increasing needs of their constituents. Change is inevitable but it is also manageable and controllable (Seymour, 1988). It is imperative for institutions of higher education to manage change effectively as they continue to struggle to be responsive and flexible in today's competitive environment.

APPENDIX A

PERMISSION LETTER FROM P&S COUNCIL

October 8, 2009

Human Subjects Review Committee
The University of Iowa
Iowa City IA 52242

Dear Committee Members:

The purpose of this letter is to certify that Mr. Wing Keung Jason Lau has permission to conduct his research within the Professional and Scientific employees at [redacted] for his doctoral dissertation. The research will focus on the employees' work environment. In particular, questions will focus on employee empowerment, perceived organizational support for innovation, and organizational trust.

We understand the scope of his research and how he will collect and present his data. All information to be gathered will be done in a confidential and appropriate manner. Mr. Lau has indicated that the survey will be voluntary and that participants' responses will be completely anonymous and that no individual responses will be identified. I further understand that Mr. Lau's study is expected to begin on November 15, 2009.

We would like to request that once Jason Lau has completed his research, that he come to [redacted] and present his findings. It is also requested that a copy of his dissertation be placed at [redacted] library.

If you have any questions or need further assistance, please contact me at (319) 273-6730.

Sincerely,

[redacted]
President, Professional and Scientific Council

APPENDIX B

PRE-SURVEY NOTIFICATION POSTCARD

Dear Colleague:

In a few days you will receive a request to fill out a brief web survey for a research project being conducted by Jason Lau, a doctoral candidate at The University of Iowa.

The research project being performed is related to employee empowerment. We hope to expand our knowledge base about empowerment, and our understanding of non-academic professional staff in higher education.

This survey should only take about 5-10 minutes of your time. It is being sent to all voting members of the P&S Council. Participation in this survey is completely voluntary. Survey responses will be kept in the strictest confidence.

If you have any questions, please don't hesitate to contact Jason Lau at [redacted]. Thank you very much for your consideration of this study.

Sincerely,

[redacted]
President
Professional and Scientific Council
[redacted]

Jason Lau
Doctoral Candidate
Department of Educational Policy and Leadership Studies
The University of Iowa

APPENDIX C

FIRST SURVEY INVITATION EMAIL

Subject: Employee Empowerment Survey

Dear P&S Employees,

I would like extend an invitation to participate in a research study conducted by a graduate student from The University of Iowa. If you agree to participate in the study you will be asked to complete the Employee Empowerment Survey that focuses on relationships between employees' levels of empowerment and perceived support for innovation, and organizational trust among non-academic professional employees in higher education. This survey should only take 5-10 minutes of your time. You are being invited to participate in this research study as a member of the Professional & Scientific salaried employees working at t[redacted]

This study is conducted by Jason Lau, a former P&S employee at [redacted] Jason is currently pursuing his Ph.D. in Higher Education at The University of Iowa. He has completed all of the course work required for this degree and is now beginning his dissertation. Your support to his project would be greatly appreciated.

Empowerment has long been associated with organizational outcomes such as innovation, greater effectiveness, and better performance. However, there is minimal research on nonacademic professional staff in higher education. This study may expand the knowledge base about empowerment, and our understanding of non-academic professional staff in higher education.

Participation in this survey is completely voluntary.

Please click on the link below to complete the on-line survey. You will be asked to read additional information about the study before beginning the survey. We would appreciate your response by next Thursday, January 28, 2010. Thank you for your participation.

https://survey.uiowa.edu/wsb.dll/1067/empowerment.htm

If you have any questions regarding this survey, please feel free to contact Jason Lau at [redacted]

Best Regards,

[redacted]
President
Professional and Scientific Council

APPENDIX D

WEB SURVEY

Employee Empowerment Survey

INFORMED CONSENT DOCUMENT

Project Title: **Examining Associations between Empowerment and Perceived Support for Innovation, and Organizational Trust among Non-academic Professional Staff in Higher Education**

Principal Investigator: **Wing Keung Jason Lau, DSW, BA, MA**

Research Team Contact: **Wing Keung Jason Lau** [redacted]

This consent form describes the research study to help you decide if you want to participate. This form provides important information about what you will be asked to do during the study, about the risks and benefits of the study, and about your rights as a research subject.

- If you have any questions about or do not understand something in this form, you should ask the research team for more information.
- You should discuss your participation with anyone you choose such as family or friends.
- Do not agree to participate in this study unless the research team has answered your questions and you decide that you want to be part of this study.

WHAT IS THE PURPOSE OF THIS STUDY?
This is a research study. We are inviting you to participate in this research study because you are an adult of age 18 years or older and employed at [redacted] in the Professional and Scientific (P&S) staff classification, holding either a term, contract, or permanent position assignment.

The purpose of this research study is to investigate the relationships between employees' levels of empowerment and perceived support for innovation, and organizational trust among non-academic professional employees in higher education.

HOW MANY PEOPLE WILL PARTICIPATE?
Approximately 550 people will take part in this study conducted by investigator at The University of Iowa.

HOW LONG WILL I BE IN THIS STUDY?
If you agree to take part in this study, your involvement will last for about 5-10 minutes.

WHAT WILL HAPPEN DURING THIS STUDY?
After giving your consent to participate, you will be asked to fill out a web survey through the Survey@Iowa survey system at The University of Iowa. Survey@Iowa is a secure, online data collection service powered by WebSurveyor which is an enterprise-level, online data collection service.

You will be asked to provide your gender, age, work division, level of education, years of professional

experience, years of employment at [redacted], and administrative experience. You will also be asked to answer questions about your perceptions of empowerment, perceived organizational support, and organizational trust. You are free to skip any questions you prefer not to answer on the survey, or you may also terminate your participation at any time while completing the survey. The survey will take approximately 5-10 minutes to complete.

WHAT ARE THE RISKS OF THIS STUDY?
You may experience one or more of the risks indicated below from being in this study. In addition to these, there may be other unknown risks, or risks that we did not anticipate, associated with being in this study.

1. There are no anticipated risks associated with this study.
2. Participation in this study may be an inconvenience. Yet, you are free to decline to answer any questions you do not wish to answer or to stop participating in the project at any time by closing the Internet browser.

WHAT ARE THE BENEFITS OF THIS STUDY?
You will not benefit from being in this study. However, we hope that, in the future, other people might benefit from this study because there may be increased understanding toward non-academic professional staff in higher education. The study may provide university administrators with an insight as to ways organizational climate can be shaped to influence successful empowerment-based strategies and policies.

WILL IT COST ME ANYTHING TO BE IN THIS STUDY?
You will not have any costs for being in this research study.

WILL I BE PAID FOR PARTICIPATING?
You will not be paid for being in this research study.

WHO IS FUNDING THIS STUDY?
The University and the research team are receiving no payments from other agencies, organizations, or companies to conduct this research study.

WHAT ABOUT CONFIDENTIALITY?
We will keep your participation in this research study confidential to the extent permitted by law. However, it is possible that other people such as those indicated below may become aware of your participation in this study and may inspect and copy records pertaining to this research. Some of these records could contain information that personally identifies you.

- federal government regulatory agencies,
- auditing departments of The University of Iowa, and
- The University of Iowa Institutional Review Board (a committee that reviews and approves research studies)

To help protect your confidentiality, all electronic data will be stored on a secure, password-protected Files@Iowa Premium data system provided and maintained by The University of Iowa. Access is restricted to the principal investigator only. By default, persistent cookies are not required by survey respondents when responding to a WebSurveyor survey to further protect their privacy.

No electronic data will be stored, transferred, or transported on any local computers or temporary devices at any time. Survey responses will be printed and locked in a safe place. The online survey and all responses will then be removed from the Internet. In addition, no names, addresses, phone numbers, or emails will be solicited. Individual respondents will remain anonymous and that the data will be summarized at the overall and division levels. No individual responses will be identified. If we write a report or article about this study or share the study data set with others, we will do so in such a way that you cannot be directly identified. However, as an online participant in this research, there is always the risk of intrusion by outside agents, i.e., hacking, and therefore the possibility of being identified.

IS BEING IN THIS STUDY VOLUNTARY?

Taking part in this research study is completely voluntary. You may choose not to take part at all. If you decide to be in this study, you may stop participating at any time. If you decide not to be in this study, or if you stop participating at any time, you won't be penalized or lose any benefits for which you otherwise qualify. You are free to decline to answer any questions you do not wish to answer or to stop participating in the project at any time by closing the Internet browser.

WHAT IF I HAVE QUESTIONS?

We encourage you to ask questions. If you have any questions about the research study itself, please contact: Wing Keung Jason Lau either by email at [redacted] or by phone at [redacted].

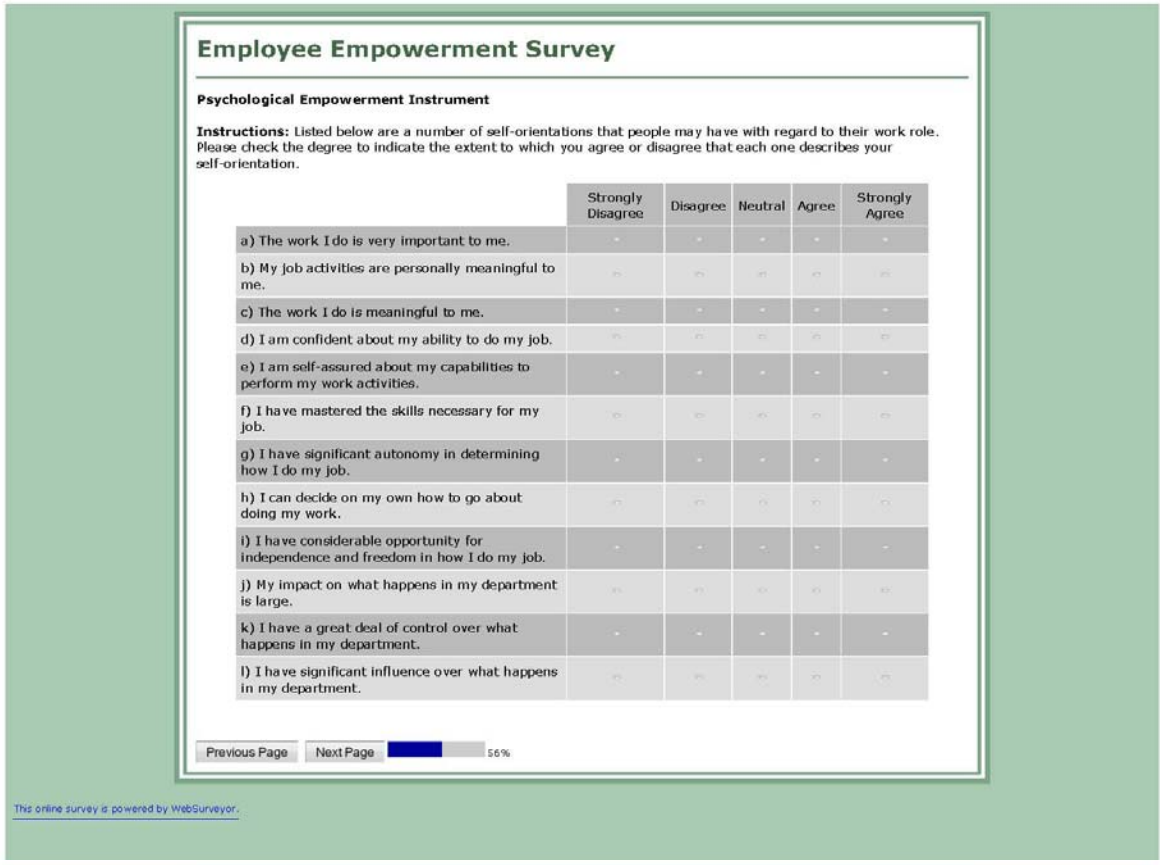
If you have questions, concerns, or complaints about your rights as a research subject or about research related injury, please contact the Human Subjects Office, 340 College of Medicine Administration Building, The University of Iowa, Iowa City, Iowa, 52242, (319) 335-6564, or e-mail irb@uiowa.edu. General information about being a research subject can be found by clicking "Info for Public" on the Human Subjects Office web site, http://research.uiowa.edu/hso. To offer input about your experiences as a research subject or to speak to someone other than the research staff, call the Human Subjects Office at the number above.

This Informed Consent Document is not a contract. It is a written explanation of what will happen during the study if you decide to participate. By clicking on 'Yes, I agree to participate', you are not waiving any of your legal rights by agreeing with this Informed Consent Document. You have been informed about this study's purpose, procedures, possible benefits and risks. Please print out this web-page and keep a copy of this Form. If you have further questions, please contact Jason Lau at [redacted]. You have been given the opportunity to ask questions before you sign, and you have been told that you can ask other questions at any time. You voluntarily agree to participate in this study. **CLICKING ON 'YES, I AGREE TO PARTICIPATE' INDICATES THAT YOU ARE AT LEAST EIGHTEEN YEARS OF AGE AND YOU ARE GIVING YOUR INFORMED CONSENT TO BE A SUBJECT IN THIS STUDY.** By clicking on 'Yes, I agree to participate', you are not waiving any of your legal rights by agreeing with this Informed Consent Document.

Please select one:

- ○ Yes, I agree to participate
- ○ No, I do not agree to participate

Next Page 11%



Employee Empowerment Survey

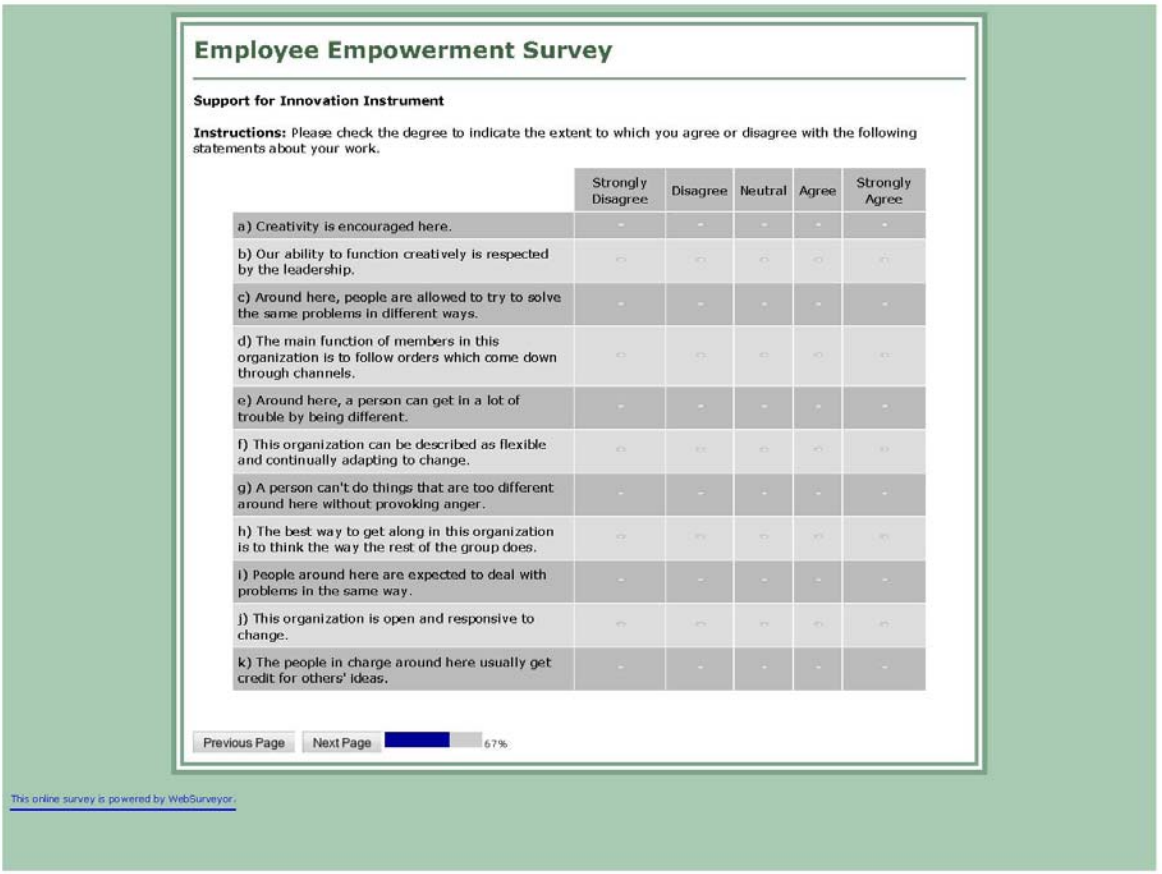
Psychological Empowerment Instrument

Instructions: Listed below are a number of self-orientations that people may have with regard to their work role. Please check the degree to indicate the extent to which you agree or disagree that each one describes your self-orientation.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
a) The work I do is very important to me.	-	-	-	-	-
b) My job activities are personally meaningful to me.	-	-	-	-	-
c) The work I do is meaningful to me.	-	-	-	-	-
d) I am confident about my ability to do my job.	-	-	-	-	-
e) I am self-assured about my capabilities to perform my work activities.	-	-	-	-	-
f) I have mastered the skills necessary for my job.	-	-	-	-	-
g) I have significant autonomy in determining how I do my job.	-	-	-	-	-
h) I can decide on my own how to go about doing my work.	-	-	-	-	-
i) I have considerable opportunity for independence and freedom in how I do my job.	-	-	-	-	-
j) My impact on what happens in my department is large.	-	-	-	-	-
k) I have a great deal of control over what happens in my department.	-	-	-	-	-
l) I have significant influence over what happens in my department.	-	-	-	-	-

Previous Page Next Page 56%

This online survey is powered by WebSurveyor.



Employee Empowerment Survey

Support for Innovation Instrument

Instructions: Please check the degree to indicate the extent to which you agree or disagree with the following statements about your work.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
a) Creativity is encouraged here.	-	-	-	-	-
b) Our ability to function creatively is respected by the leadership.	-	-	-	-	-
c) Around here, people are allowed to try to solve the same problems in different ways.	-	-	-	-	-
d) The main function of members in this organization is to follow orders which come down through channels.	-	-	-	-	-
e) Around here, a person can get in a lot of trouble by being different.	-	-	-	-	-
f) This organization can be described as flexible and continually adapting to change.	-	-	-	-	-
g) A person can't do things that are too different around here without provoking anger.	-	-	-	-	-
h) The best way to get along in this organization is to think the way the rest of the group does.	-	-	-	-	-
i) People around here are expected to deal with problems in the same way.	-	-	-	-	-
j) This organization is open and responsive to change.	-	-	-	-	-
k) The people in charge around here usually get credit for others' ideas.	-	-	-	-	-

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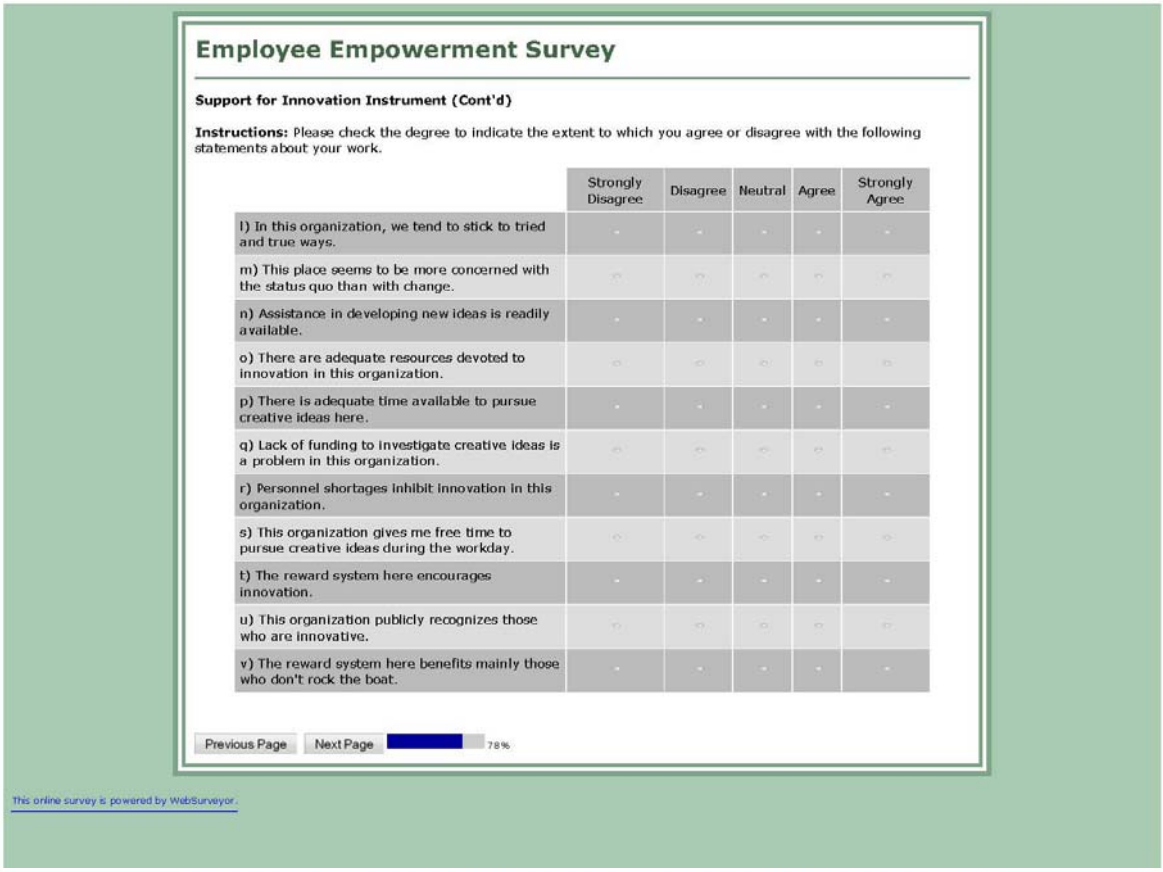
This online survey is powered by WebSurveyor.



Employee Empowerment Survey

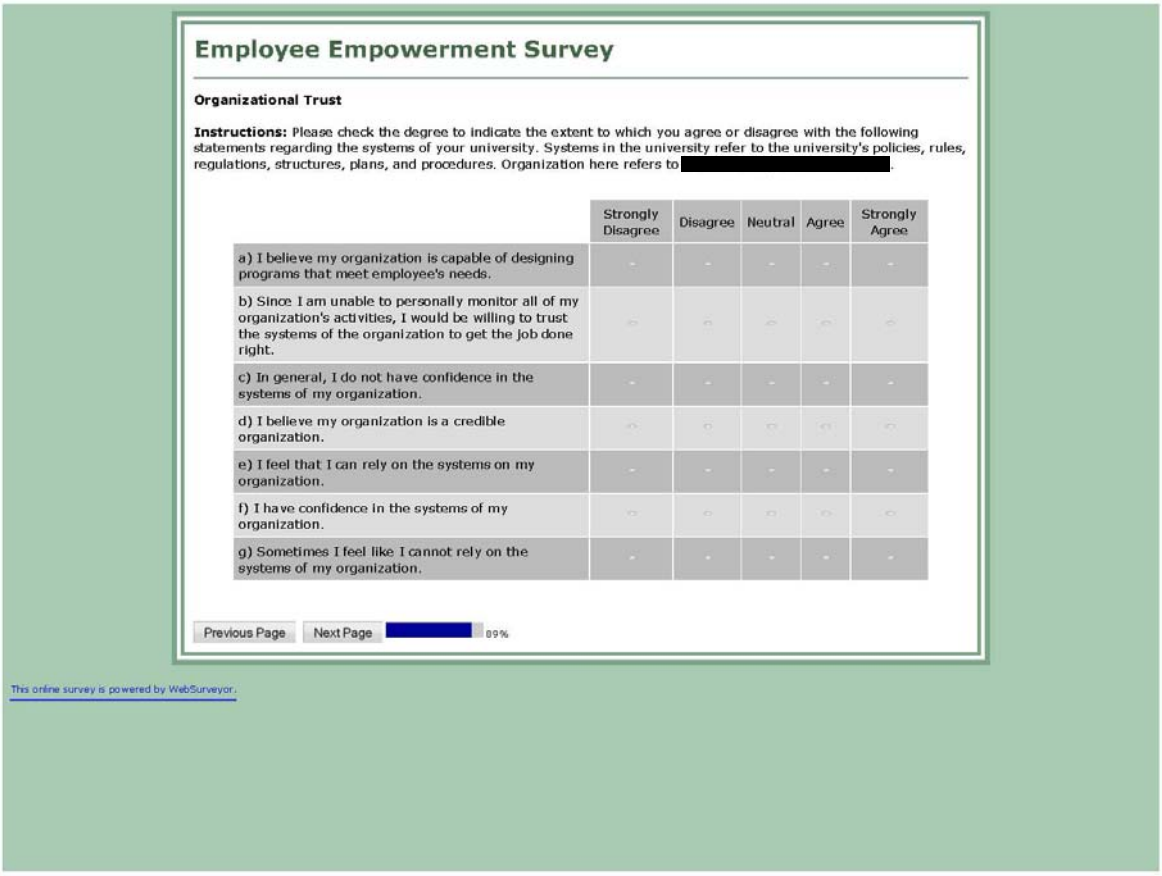
Support for Innovation Instrument (Cont'd)

Instructions: Please check the degree to indicate the extent to which you agree or disagree with the following statements about your work.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
l) In this organization, we tend to stick to tried and true ways.	-	-	-	-	-
m) This place seems to be more concerned with the status quo than with change.	-	-	-	-	-
n) Assistance in developing new ideas is readily available.	-	-	-	-	-
o) There are adequate resources devoted to innovation in this organization.	-	-	-	-	-
p) There is adequate time available to pursue creative ideas here.	-	-	-	-	-
q) Lack of funding to investigate creative ideas is a problem in this organization.	-	-	-	-	-
r) Personnel shortages inhibit innovation in this organization.	-	-	-	-	-
s) This organization gives me free time to pursue creative ideas during the workday.	-	-	-	-	-
t) The reward system here encourages innovation.	-	-	-	-	-
u) This organization publicly recognizes those who are innovative.	-	-	-	-	-
v) The reward system here benefits mainly those who don't rock the boat.	-	-	-	-	-

Previous Page Next Page 78%

This online survey is powered by WebSurveyor.



Employee Empowerment Survey

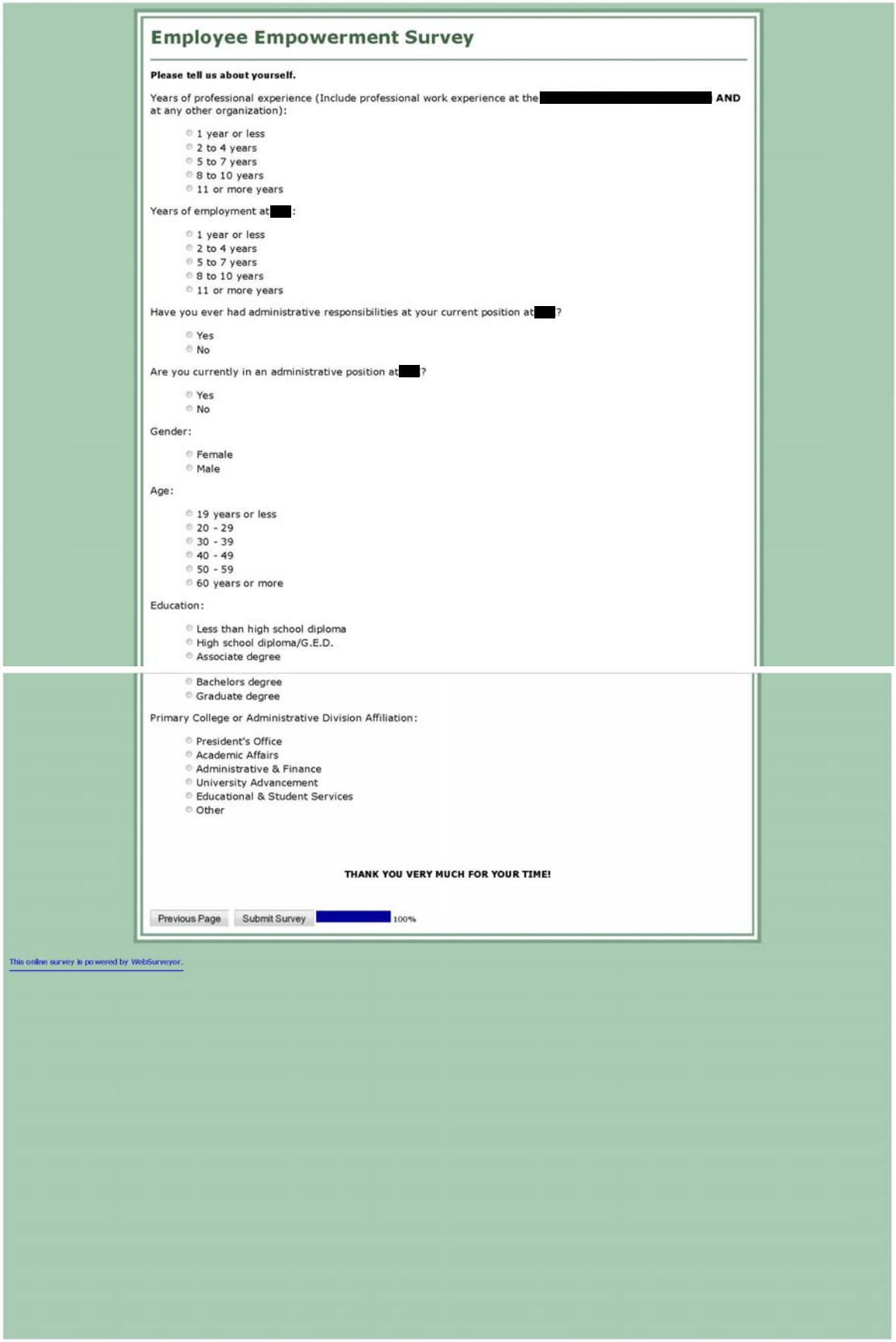
Organizational Trust

Instructions: Please check the degree to indicate the extent to which you agree or disagree with the following statements regarding the systems of your university. Systems in the university refer to the university's policies, rules, regulations, structures, plans, and procedures. Organization here refers to [redacted].

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
a) I believe my organization is capable of designing programs that meet employee's needs.	-	-	-	-	-
b) Since I am unable to personally monitor all of my organization's activities, I would be willing to trust the systems of the organization to get the job done right.	-	-	-	-	-
c) In general, I do not have confidence in the systems of my organization.	-	-	-	-	-
d) I believe my organization is a credible organization.	-	-	-	-	-
e) I feel that I can rely on the systems on my organization.	-	-	-	-	-
f) I have confidence in the systems of my organization.	-	-	-	-	-
g) Sometimes I feel like I cannot rely on the systems of my organization.	-	-	-	-	-

Previous Page Next Page 89%

This online survey is powered by WebSurveyor.



Employee Empowerment Survey

Please tell us about yourself.

Years of professional experience (Include professional work experience at the [redacted] **AND** at any other organization):

- 1 year or less
- 2 to 4 years
- 5 to 7 years
- 8 to 10 years
- 11 or more years

Years of employment at [redacted]:

- 1 year or less
- 2 to 4 years
- 5 to 7 years
- 8 to 10 years
- 11 or more years

Have you ever had administrative responsibilities at your current position at [redacted]?

- Yes
- No

Are you currently in an administrative position at [redacted]?

- Yes
- No

Gender:

- Female
- Male

Age:

- 19 years or less
- 20 - 29
- 30 - 39
- 40 - 49
- 50 - 59
- 60 years or more

Education:

- Less than high school diploma
- High school diploma/G.E.D.
- Associate degree
- Bachelors degree
- Graduate degree

Primary College or Administrative Division Affiliation:

- President's Office
- Academic Affairs
- Administrative & Finance
- University Advancement
- Educational & Student Services
- Other

THANK YOU VERY MUCH FOR YOUR TIME!

Previous Page | Submit Survey | 100%

This online survey is powered by WebSurveyor.

survey @ iowa

Your Survey Has Been Accepted!

Thank you for submitting your survey.
Your responses have been received and recorded by WebSurveyor on behalf of our client.

APPENDIX E

SURVEY EMAIL REMINDER

Subject: Employee Empowerment Survey Reminder

Dear P&S Employees,

Last week an invitation to participate in a survey seeking your opinions about employee empowerment was emailed to you. This survey should only take 5-10 minutes of your time. You are being invited to participate in this research study as a P&S employee at [redacted].

This study is conducted by Jason Lau, a former P&S employee at [redacted] Jason is currently pursuing his Ph.D. in Higher Education at The University of Iowa. Your support to his project would be greatly appreciated.

If you have already completed the survey, please accept our sincere thanks. If not, please do so today. We are especially grateful for your participation. We hope that the information collected may expand the knowledge base about employee empowerment, and our understanding of non-academic professional staff in higher education.

If you have not completed the survey, please take this opportunity to reconsider participation. Please click on the link below now to complete the on-line survey. You will be asked to read additional information about the study before beginning the survey:

https://survey.uiowa.edu/wsb.dll/1067/empowerment.htm

You will only have until this Thursday, January 28, 2010 to complete the survey.

Participation in this survey is completely voluntary.

If you have any questions regarding this survey, please feel free to contact Jason Lau at [redacted]

Thank you very much for your consideration.

Best Regards,

[redacted]
President
Professional and Scientific Council

APPENDIX F

SURVEY EMAIL FINAL REMINDER

Subject: Employee Empowerment Survey Final Reminder

Dear P&S Employees,

Approximately a week ago you received an email from me, inviting you to participate in an Employee Empowerment Survey. If you have already completed the survey, please accept our sincere thanks. If not, we ask that you please consider participation today. The survey's deadline has been extended to Wednesday, February 3, 2010. We would greatly appreciate your participation in this study.

We hope that the information collected in this study may expand the knowledge base about employee empowerment, and our understanding of non-academic professional staff in higher education.

Please click on the link below now to complete the on-line survey. You will be asked to read additional information about the study before beginning the survey:

https://survey.uiowa.edu/wsb.dll/1067/empowerment.htm

Participation in this survey is completely voluntary.

If you have any questions regarding this survey, please feel free to contact Jason Lau at [redacted]

Thank you very much for your consideration.

Best Regards,

[redacted]
President
Professional and Scientific Council

APPENDIX G

IRB ASSURANCE FORM

Wing Keung Jason Lau, Dip. SW, BA, MA
Examining Associations between Empowerment and Perceived Support for Innovation, and Organizational Trust among Non-academic Professional Staff in Higher Education

Assurances

Principal Investigator (PI) - *As PI, I assure that:*

- I am ultimately responsible for the conduct of the study.
- I agree to comply with all applicable UI policies and procedures, and applicable federal, state and local laws.
- The application is consistent with proposal(s) submitted to external funding agencies.
- The research will only be performed by qualified personnel.
- All persons assisting with the research are adequately informed about the protocol and their research-related duties and functions.
- I will not implement any changes in the approved IRB application, study protocol, or informed consent process without prior IRB approval (except in an emergency, if necessary to safeguard the well-being of a human participant).
- If unavailable to conduct this research personally, as when on sabbatical leave, I will arrange for another investigator to assume direct responsibility for the study. Either this person is named as another investigator in this application, or I will notify the IRB of such arrangements.
- I will obtain Continuing Review approval prior to 12:01 am on the date the approval for the study expires. I understand if I fail to apply for continuing review, approval for the study will automatically expire, and all study activity must cease until IRB approval is granted.
- If protected health information is used or created as part of this research project, the research team agrees NOT to reuse or disclose the information to any other person or entity (beyond the named research team) except as required by law, for authorized oversight of the research project, or unless subsequent IRB approval is obtained for such reuse or disclosure.
- If members of the research team access protected health information from a covered component in order to seek consent/authorization for research, such access is necessary for the research, is solely for that purpose, and the information will not be removed from the covered component.
- Neither I nor any member of the research team has a significant financial interest, as defined by the University of Iowa Operations Manual, whereby the value of the interest to me or any member of the research team could be influenced by the outcome of the study.
- *EFFECTIVE 10/1/09* If the above stated research study has a plan to compensate the research subjects participating in this project, I acknowledge that our unit has a Cash Handling Procedure that has been approved by Accounting Services.
- I further assure that the proposed research is not currently being conducted and will not begin until IRB approval has been obtained.

Signature of Principal Investigator — 10/23/2009 Date

WING KEUNG JASON LAU
Printed Name of the Principal Investigator

DEO (Department Chair) - *My signature assures that the investigator:*

- Is qualified to conduct the research as described in this application.
- Has adequate resources, facilities, and numbers of qualified staff to conduct the research as described in this application.
- Has used sound study design consistent with the standards of the investigator's area of research.
- *EFFECTIVE 10/1/09* If the above stated research study has a plan to compensate the research subjects participating in this project, I acknowledge that our unit has a Cash Handling Procedure that has been approved by Accounting Services.
- Has available time ~~to oversee and~~ conduct this project.

Signature of DEO (Department Chair) — 10/23/9 Date

Christopher Morphew
Printed Name of the (Department Chair)

Wing Keung Jason Lau, Dip. SW, BA, MA
Examining Associations between Empowerment and Perceived Support for Innovation, and Organizational Trust among Non-academic Professional Staff in Higher Education

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Faculty Supervisor (If PI is a student) The faculty sponsor must be a member of the UI faculty and is considered the responsible party for legal and ethical performance of the project.

As the faculty supervisor on this research application, I assure that:

- I will meet with the student investigator on a regular basis and monitor study progress.
- The student is knowledgeable about the regulations and policies governing research with human subjects and has sufficient training and experience to conduct this particular study in accord with the approved protocol.
- If I will be unavailable to supervise this research personally, as when on sabbatical leave, I will arrange for an alternate Faculty Supervisor to assume direct responsibility in my absence and I will advise the IRB by letter in advance of such arrangements.
- *EFFECTIVE 10/1/09* If the above stated research study has a plan to compensate the research subjects participating in this project, I acknowledge that our unit has a Cash Handling Procedure that has been approved by Accounting Services.

Lelia Helms/KH — Signature of Supervising Faculty

10/23/09 — Date

APPENDIX H

IRB APPROVAL DOCUMENT

Human Subjects Office
340 Medicine Administration Building
Iowa City, Iowa 52242-1101
319-335-6564 *Fax* 319-335-7310
irb@uiowa.edu
http://research.uiowa.edu/hso

IRB ID #: 200910774

To: Wing Keung Jason Lau

From: IRB-02 DHHS Registration # IRB00000100,
Univ of Iowa, DHHS Federalwide Assurance # FWA00003007

Re: Examining Associations between Empowerment and Perceived Support for Innovation, and Organizational Trust among Non-academic Professional Staff in Higher Education

---

Approval Date: 11/17/09

Next IRB Approval Due Before: N/A

Type of Application:	**Type of Application Review:**	**Approved for Populations:**
☒ New Project	☐ Full Board:	☐ Children
☐ Continuing Review	Meeting Date:	☐ Prisoners
☐ Modification	☐ Expedited	☐ Pregnant Women, Fetuses, Neonates
	☒ Exempt	

Source of Support:

This approval has been electronically signed by IRB Chair:
Elona McLees, CIP
11/17/09 1025

IRB Approval: IRB approval indicates that this project meets the regulatory requirements for the protection of human subjects. IRB approval does not absolve the principal investigator from complying with other institutional, collegiate, or departmental policies or procedures.

Agency Notification: If this is a New Project or Continuing Review application and the project is funded by an external government or non-profit agency, the original HHS 310 form, "Protection of Human Subjects Assurance Identification/IRB Certification/Declaration of Exemption," has been forwarded to the UI Division of Sponsored Programs, 100 Gilmore Hall, for appropriate action. You will receive a signed copy from Sponsored Programs.

Recruitment/Consent: Your IRB application has been approved for recruitment of subjects not to exceed the number indicated on your application form. If you are using written informed consent, the IRB-approved and stamped Informed Consent Document(s) are attached. Please make copies from the attached "masters" for subjects to sign when agreeing to participate. The original signed Informed Consent Document should be placed in your research files. A copy of the Informed Consent Document should be given to the subject. (A copy of the *signed* Informed Consent Document should be given to the subject if your Consent contains a HIPAA authorization section.) If hospital/clinic patients are being enrolled, a copy of the signed Informed Consent Document should be placed in the subject's chart, unless a Record of Consent form was approved by the IRB.

Continuing Review: Federal regulations require that the IRB re-approve research projects at intervals appropriate to the degree of risk, but no less than once per year. This process is called "continuing review." Continuing review for non-exempt research is required to occur as long as the research remains active for long-term follow-up of research subjects, even when the research is permanently closed to enrollment of new subjects and all subjects have completed all research-related interventions and to occur when the remaining research activities are limited to collection of private identifiable information. Your project "expires" at 12:01 AM on the date indicated on the preceding page ("Next IRB Approval Due on or Before"). You must obtain your next IRB approval of this project on or before that expiration date. You are responsible for submitting a Continuing Review application in sufficient time for approval before the expiration date, however the HSO will send a reminder notice approximately 60 and 30 days prior to the expiration date.

Modifications: Any change in this research project or materials must be submitted on a Modification application to the IRB for prior review and approval, except when a change is necessary to eliminate apparent immediate hazards to subjects. The investigator is required to promptly notify the IRB of any changes made without IRB approval to eliminate apparent immediate hazards to subjects using the Modification/Update Form. Modifications requiring the prior review and approval of the IRB include but are not limited to: changing the protocol or study procedures, changing investigators or funding sources, changing the Informed Consent Document, increasing the anticipated total number of subjects from what was originally approved, or adding any new materials (e.g., letters to subjects, ads, questionnaires).

Unanticipated Problems Involving Risks: You must promptly report to the IRB any serious and/or unexpected adverse experience, as defined in the UI Investigator's Guide, and any other unanticipated problems involving risks to subjects or others. The Reportable Events Form (REF) should be used for reporting to the IRB.

Audits/Record-Keeping: Your research records may be audited at any time during or after the implementation of your project. Federal and University policies require that all research records be maintained for a period of three (3) years following the close of the research project. For research that involves drugs or devices seeking FDA approval, the research records must be kept for a period of three years after the FDA has taken final action on the marketing application.

Additional Information: Complete information regarding research involving human subjects at The University of Iowa is available in the "Investigator's Guide to Human Subjects Research." Research investigators are expected to comply with these policies and procedures, and to be familiar with the University's Federalwide Assurance, the Belmont Report, 45CFR46, and other applicable regulations prior to conducting the research. These documents and IRB application and related forms are available on the Human Subjects Office website or are available by calling 335-6564.

APPENDIX I

INFORMED CONSENT DOCUMENT

FOR IRB USE ONLY
APPROVED BY: IRB-02
IRB ID #: 200910774
APPROVAL DATE: 11/17/09
EXPIRATION DATE: N/A

CONSENT DOCUMENT

Project Title: **Examining Associations between Empowerment and Perceived Support for Innovation, and Organizational Trust among Non-academic Professional Staff in Higher Education**

Principal Investigator: **Wing Keung Jason Lau, DSW, BA, MA**

Research Team Contact: **Wing Keung Jason Lau** [redacted]

We invite you to participate in a research study being conducted by investigators from The University of Iowa. The purpose of this research study is to investigate the relationships between employees' levels of empowerment and perceived support for innovation, and organizational trust among non-academic professional employees in higher education.

If you agree to take part in this study, your involvement will last for about 5-10 minutes. You will be asked to fill out a web survey.

You will be asked to provide your gender, age, work division, level of education, years of professional experience, years of employment at [redacted], and administrative experience. You will also be asked to answer questions about your perceptions of empowerment in your organization, perceived organizational support, and organizational trust. You are free to skip any questions you prefer not to answer on the survey, or you may also terminate your participation at any time while completing the survey.

You will be asked to provide information over the Internet. Information provided via the internet may be viewed by individuals who have access to the computers where the information is collected or stored. It is also possible that your responses could be viewed by unauthorized persons. We will use a secure web site to collect the study information and password protected computers to store the study information. We will not collect any information in the on-line questions that would identify you. In any reports of this study, the data will be summarized at the overall and division levels. No individual responses will be identified.

Taking part in this research study is completely voluntary. If you do not wish to participate in this study, indicate that at the bottom of this page or close your web browser at any time without submitting the survey.

If you have questions about the rights of research subjects, please contact the Human Subjects Office, 300 College of Medicine Administration Building, The University of Iowa, Iowa City, IA 52242, (319) 335-6564, or e-mail irb@uiowa.edu.

FOR IRB USE ONLY
APPROVED BY: IRB-02
IRB ID #: 200910774
APPROVAL DATE: 11/17/09
EXPIRATION DATE: N/A

Thank you very much for your consideration of this research study.

If you agree to be in the study, go to the survey by clicking on 'YES, I AGREE TO PARTICIPATE' and the NEXT PAGE button below.

Please select one:

Yes, I agree to participate

No, I do not agree to participate

APPENDIX J

SURVEY INSTRUMENT MEASURES

Employee Empowerment Survey

Psychological Empowerment Instrument

Instructions: Listed below are a number of self-orientations that people may have with regard to their work role. Please check the degree to indicate the extent to which you agree or disagree that each one describes your self-orientation.

1 - Strongly Disagree (SD)
2 - Disagree (D)
3 - Neutral (N)
4 - Agree (A)
5 - Strongly Agree (SA)

	SD	D	N	A	SA
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

Support for Innovation Instrument

Instructions: Please check the degree to indicate the extent to which you agree or disagree with the following statements about your work.

1 - Strongly Disagree (SD)
2 - Disagree (D)
3 - Neutral (N)
4 - Agree (A)
5 - Strongly Agree (SA)

	SD	D	N	A	SA
1. Creativity is encouraged here.	1	2	3	4	5
2. Our ability to function creatively is respected by the leadership.	1	2	3	4	5
3. Around here, people are allowed to try to solve the same problems in different ways.	1	2	3	4	5
4. The main function of members in this organization is to follow orders which come down through channels.	1	2	3	4	5
5. Around here, a person can get in a lot of trouble by being different.	1	2	3	4	5
6. This organization can be described as flexible and continually adapting to change.	1	2	3	4	5
7. A person can't do things that are too different around here without provoking anger.	1	2	3	4	5
8. The best way to get along in this organization is to think the way the rest of the group does.	1	2	3	4	5
9. People around here are expected to deal with problems in the same way.	1	2	3	4	5
10. This organization is open and responsive to change.	1	2	3	4	5
11. The people in charge around here usually get credit for others' ideas.	1	2	3	4	5

	SD	D	N	A	SA
12. In this organization, we tend to stick to tried and true ways.	1	2	3	4	5
13. This place seems to be more concerned with the status quo than with change.	1	2	3	4	5
14. Assistance in developing new ideas is readily available.	1	2	3	4	5
15. There are adequate resources devoted to innovation in this organization.	1	2	3	4	5
16. There is adequate time available to pursue creative ideas here.	1	2	3	4	5
17. Lack of funding to investigate creative ideas is a problem in this organization.	1	2	3	4	5
18. Personnel shortages inhibit innovation in this organization.	1	2	3	4	5
19. This organization gives me free time to pursue creative ideas during the workday.	1	2	3	4	5
20. The reward system here encourages innovation.	1	2	3	4	5
21. This organization publicly recognizes those who are innovative.	1	2	3	4	5
22. The reward system here benefits mainly those who don't rock the boat.	1	2	3	4	5

Organizational Trust

Instructions: Please check the degree to indicate the extent to which you agree or disagree with the following statements regarding the systems of your university. **Systems in the university refer to the university's policies, rules, regulations, structures, plans, and procedures. Organization here refers to [redacted].**

1 - Strongly Disagree (SD)
2 - Disagree (D)
3 - Neutral (N)
4 - Agree (A)
5 - Strongly Agree (SA)

	SD	D	N	A	SA
1. I believe my organization is capable of designing programs that meet employee needs.	1	2	3	4	5
2. Since I am unable to personally monitor all of my organization's activities, I would be willing to trust the systems of the organization to get the job done right.	1	2	3	4	5
3. In general, I do not have confidence in the systems of my organization.	1	2	3	4	5
4. I believe my organization is a credible organization.	1	2	3	4	5
5. I feel that I can rely on the systems on my organization.	1	2	3	4	5
6. I have confidence in the systems of my organization.	1	2	3	4	5
7. Sometimes I feel like I cannot rely on the systems of my organization.	1	2	3	4	5

Please tell us about yourself.

1. Year of professional experience (Include professional work experience at [redacted] **AND** at any other organization)
   ____ 1 year or less ____ 2 to 4 years ____ 5 to 7 years
   ____ 8 to 10 years ____ 11 or more years

2. Years of employment at[redacted]:
   ____ 1 year or less ____ 2 to 4 years ____ 5 to 7 years
   ____ 8 to 10 years ____ 11 or more years

3. Have you ever had administrative responsibilities at your current position at[redacted]?
   ____ Yes ____ No

4. Are you currently in an administrative position at[redacted]?
   ____ Yes ____ No

5. Gender: ____ Male ____ Female

6. Age: ____ 19 years or less ____ 20-29 ____ 30-39
   ____ 40-49 ____ 50-59 ____ 60 years or more

7. Education: ____ Less than high school diploma ____ High school diploma/G.E.D.
   ____ Associates degree ____ Bachelors degree
   ____ Graduate degree

8. Primary College or Administrative Division Affiliation:
   ____ President's Office ____ Academic Affairs
   ____ Administration & Finance ____ University Advancement
   ____ Educational & Student Services ____ Other

REFERENCES

Agrell, A., & Gustafson, R. (1996). Innovation and creativity in work groups. In M. A. West (Ed.), *The handbook of work group psychology* (pp. 317–344). Chichester, UK: John Wiley.

Aiken, M., Bacharach, S. B., & French, J. L. (1980). Organizational structure, work process, and proposal making in administrative bureaucracies. *Academy of Management Journal, 23*(4), 631-652.

Aiken, M., & Hage, J. (1971). The organic organization and innovation. *Sociology, 5*(1), 63-82.

Allaire, Y., & Firsirotu, M. E. (1984). Theories of organizational culture. *Organization Studies, 5*(3), 193.

Allen, D. K. (2003). Organizational climate and strategic change in higher education: Organizational insecurity. *Higher Education, 46*(1), 61-92.

Allison, P. D. (1999). *Multiple regression: A primer*. Thousand Oaks, CA: Pine Forge Press.

Amabile, T. M. (1988). A model of creativity and innovation in organizations. In B. M. Staw & L. L. Cummings (Eds.), *Research in organizational behavior* (Vol. 10, pp. 123-167). Greenwich, CT: JAI Press.

Amabile, T. M., Conti, R., Coon, H., Lazenby, J., & Herron, M. (1996). Assessing the work environment for creativity. *Academy of Management Journal, 39*(5), 1154-1184.

Amabile, T. M., & Gryskiewicz, N. (1989). The creative environment scales: The work environment inventory. *Creativity Research Journal, 2*, 231-254.

Amenumey, E. K., & Lockwood, A. (2008). Psychological climate and psychological empowerment: An exploration in a luxury UK hotel group. *Tourism & Hospitality Research, 8*(4), 265-281.

Anderson, N., De Dreu, C. K. W., & Nijstad, B. A. (2004). The routinization of innovation research: A constructively critical review of the state-of-the-science. *Journal of Organizational Behavior, 25*(2), 147-173. doi:10.1002/job.236

Anderson, N. R., & West, M. A. (1998). Measuring climate for work group innovation: Development and validation of the team climate inventory. *Journal of Organizational Behavior, 19*(3), 235-258.

Arad, S., Hanson, M. A., & Schneider, R. (1997). A framework for the study of relationships between organizational characteristics and organizational innovation. *Journal of Creative Behavior, 31*(1), 42-58.

Argyris, C. (1986). Skilled incompetence. *Harvard Business Review, 64*(5), 74-79.

Argyris, C. (1998). Empowerment: The emperor's new clothes. *Harvard Business Review, 76*(3), 98-105.

Ashforth, B. E. (1989). The experience of powerlessness in organizations. *Organizational Behavior & Human Decision Processes, 43*(2), 207.

Austin, A. E., & Gamson, Z. F. (1983). Academic workplace: New demands, heightened tensions. *ASHE-ERIC Higher Education Research Report No. 10.* Washington, DC: The George Washington University.

Arvonen, J., & Ekvall, G. (1999). Effective leadership style: Both universal and contingent? *Creativity & Innovation Management, 8*(4), 242.

Axtell, C. M., Holman, D. J., Unsworth, K. L., Wall, T. D., & Waterson, P. E. (2000). Shopfloor innovation: Facilitating the suggestion and implementation of ideas. *Journal of Occupational & Organizational Psychology, 73*(3), 265-385.

Babbie, E. R. (2004). *The practice of social research* (10th ed.). Belmont, CA: Wadsworth Thomson Learning.

Bacharach, S. B., Bamberger, P., Conley, S. C., & Bauer, S. (1990). The dimensionality of decision participation in educational organizations: The value of multi-domain evaluative approach. *Educational Administration Quarterly, 26*(2), 126-167. doi:10.1177/0013161X90026002003

Baker, D. (2000). *An examination of the relationship between employee empowerment and organizational commitment*. Unpublished doctoral dissertation, University of Iowa, Iowa City.

Bandura, A. (1989). Perceived self-efficacy in the exercise of personal agency. *The Psychologist: Bulletin of the British Psychological Society, 2*, 411-424.

Barber, B. (1983). *The logic and limits of trust*. New Brunswick, NJ: Rutgers University Press.

Barnes, L. B. (1981). Managing the paradox of trust. *Harvard Business Review, 59*, 107-116.

Barnett, H. G. (1953). *Innovation: The basis of cultural change* (1st ed.). New York, NY: McGraw-Hill.

Basadur, M. S. (1995). *The power of innovation*. London, UK: Pitman Professional Publishing.

Bayes, J. H. (1991). Women in public administration in the United States. *Women & Politics, 11*(4), 85-109.

Becker, S. W., & Whisler, T. L. (1967). The innovative organization: A selective view of current theory and research. *Journal of Business, 40*(4), 462-469.

Bennis, W. G., & Nanus, B. (1985). *Leaders: The strategies for taking charge*. New York, NY: Harper & Row.

Boudrias, J. S., Gaudreau, P., & Laschinger, H. K. S. (2004). Testing the structure of psychological empowerment: Does gender make a difference? *Educational & Psychological Measurement, 64*(5), 861-877. doi: 10.1177/0013164404264840

Bowen, D. E., & Lawler, E., III. (1992). The empowerment of service workers: What, why, how, and when. *Sloan Management Review, 33*(3), 31-39.

Bowen, H. R., & Schuster, J. H. (1986). *American professors: A national resource imperiled*. New York, NY: Oxford University Press.

Brief, A. P., & Nord, W. R. (1990). *Meanings of occupational work: A collection of essays*. Lexington, MA: Lexington Books.

Bryan, G. A. (1995). *The dynamics of individual-to-organization trust relationships in a higher education setting.* Unpublished doctoral dissertation, Cleveland State University, Cleveland, OH.

Bunce, D., & West, M. A. (1995). Self perceptions and perceptions of group climate as predictors of individual innovation at work. *Applied Psychology, 44*(3), 199-215.

Burningham, C., & West, M. A. (1995). Individual, climate, and group interaction processes as predictors of work team innovation. *Small Group Research, 26*(1), 106-117. doi: 10.1177/1046496495261006

Butler, J. K. (1991). Towards understanding and measuring conditions of trust: Evolution of a conditions of trust inventory. *Journal of Management, 17*, 643-663.

Cameron, A., & Masterson, A. (2000). Managing the unmanageable? Nurse executive directors and new role developments in nursing. *Journal of Advanced Nursing, 31*(5), 1081-1088.

Chan, Y. H., Taylor, R. R., & Markham, S. (2008).The role of subordinates' trust in a social exchange-driven psychological empowerment process. *Journal of Managerial Issues, 20*(4), 444-467.

Churchill, G. (1979). A paradigm for developing better measures of marketing constructs. *Journal of Marketing Research, 16*(1),64-73.

Cohen, M. D., & March, J. G. (1974). *Leadership and ambiguity: The American college president*. New York, NY: McGraw Hill.

Comrey, A. L. (1973). *A first course in factor analysis.* New York, NY: Academic Press.

Conger, J. A., & Kanungo, R. N. (1988). The empowerment process: Integrating theory and practice. *Academy of Management Review, 13*(3), 471-482.

Cook, C., Heath, F., & Thompson, R. L. (2000). A meta-analysis of response rates in web- and internet-based surveys. *Educational and Psychological Measurement, 60*, 821-836.

Cook, J., & Wall, T. (1980). New work attitude measures of trust, organizational commitment and personal need non-fulfillment. *Journal of Occupational Psychology, 53*(1), 39-52.

Cordery, J. L., Mueller, W. S., & Smith, L. M. (1991). Attitudinal and behavioral effects of autonomous group working: A longitudinal field study. *Academy of Management Journal, 34*(2), 464-476.

Corsun, D., & Enz, C. (1999). Predicting psychological empowerment among service workers: The effect of support-based relationships. *Human Relations, 52*(2), 205-224. doi: 10.1023/A:1016984802948

Costigan, R. D., Iter, S. S., & Berman, J. J. (1998). A multi-dimensional study of trust in organizations. *Journal of Managerial Issues, 10*(3), 303-317.

Cox, T. (1993). *Cultural diversity in organizations: Theory, research, and practice*. San Francisco, CA: Berrett-Koehler.

Creed, W. E. D., & Miles, R. E. (1996). Trust in organizations. A conceptual framework. In R. M. Kramer & T. R. Tyler (Eds.), *Trust in organizations: Frontiers of theory and research* (pp. 16-39). London, UK: Sage.

Culbert, S. A., & McDonough, J. J. (1986). The politics of trust and organizational empowerment. *Public Administration Quarterly, 10*(2), 171-188.

Cunningham, J. B., & MacGregor, J. (2000). Trust and the design of work: Complementary constructs in satisfaction and performance. *Human Relations, 53*(12), 1575-1591.

Currie, G. (1999). The influence of middle managers in the business planning process: A case study in the UK NHS. *British Journal of Management, 10*, 141-155.

Currie, G. (2000). The role of middle managers in strategic change in the public sector. *Public Money and Management, 20*(1), 17-23.

Daft, R. L. (1978). A dual-core model of organizational innovation. *Academy of Management Journal, 21*(2), 193-210.

Daft, R. L., & Becker, S. W. (1978). *The innovative organization: Innovation adoption in school organizations*. New York, NY: Elsevier.

Daley, D. M., & Naff, K. C. (1998). Gender differences and managerial competencies. *Review of Public Personnel Administration, 18*(2), 41.

Damanpour, F. (1987). The adoption of technological, administrative, and ancillary innovations: Impact of organizational factors. *Journal of Management, 13*(4), 675.

Damanpour, F. (1991). Organizational innovation: A meta-analysis of effects of determinants and moderators. *Academy of Management Journal, 34*(3), 555-590.

Darraugh, B. (1991). Basics of employee empowerment. *American Society for Training and Development,* May, 1-12.

Davis, R. H., Strand, R., Alexander, L. T., & Hussain, M. N. (1982). The impact of organizational and innovator variables on instructional innovation in higher education. *The Journal of Higher Education, 53*(5), 568-586.

Deci, E. L., Connell, J. P., & Ryan, R. M. (1989). Self-determination in a work organization. *Journal of Applied Psychology, 74*(4), 580.

Dee, J. R. (1999). *Organizational support for innovation: Perceptions of community college faculty*. Unpublished doctoral dissertation, The University of Iowa, Iowa City.

Dee, J. R., Henkin, A. B., & Chen, J. H.-H. (2000). Faculty autonomy: Perspectives from Taiwan. *Higher Education, 40*(2), 203-216.

Dee, J. R., Henkin, A. B., & Duemer, L. (2003). Structural antecedents and psychological correlates of teacher empowerment. *Journal of Educational Administration, 41*(3), 257-277.

Dee, J. R., Henkin, A. B., & Pell, S. W. J. (2002). Support for innovation in site-based-managed schools: Developing a climate for change. *Educational Research Quarterly, 25*(4), 36.

Dillman, D. A. (1978). *Mail and telephone surveys: The total design method*. New York, NY: Wiley.

Dillman, D. A. (2007). *Mail and internet surveys: The tailored design method* (2nd ed.). Hoboken, N.J.: Wiley.

Downs, G. W., Jr., & Mohr, L. B. (1976). Conceptual issues in the study of innovation. *Administrative Science Quarterly, 21*(4), 700-714.

Driscoll, J. W. (1978). Trust and participation in organizational decision making as predictors of satisfaction. *Academy of Management Journal, 21*, 44-56.

Edwards, P., & Collinson, M. (2002). Empowerment and managerial labor strategies: Pragmatism regained. *Work & Occupations, 29*(3), 272-299.

Eisenberger, R., Fasolo, P., & Davis-LaMastro, V. (1990). Perceived organizational support and employee diligence, commitment, and innovation. *Journal of Applied Psychology, 75*(1), 51-59. doi:10.1037/0021-9010.75.1.51

Ekvall, G. (1996). Organizational climate for creativity and innovation. *European Journal of Work & Organizational Psychology, 5*(1), 105.

Eylon, D., & Au, E. Y. (1999). Exploring empowerment cross-cultural differences along the power distance dimension. *International Journal of Intercultural Relations, 23*(3), 373-385.

Faulkner, J., & Laschinger, H. (2008). The effects of structural and psychological empowerment on perceived respect in acute care nurses. *Journal of Nursing Management, 16*(2), 214-221.

Fedor, S. C. (1996). *Educational innovation and the professional culture of middle schools.* Unpublished doctoral dissertation, University of South Carolina, Columbia.

Fox, A. (1974). *Beyond contract: Power and trust relations*. London, UK: Faber & Faber.

Fulford, M. D., & Enz, C. A. (1995). The impact of empowerment on service employees. *Journal of Managerial Issues, 7*(2), 161-176.

Gagne, M., Senecal, C. B., & Koestner, R. (1997). Proximal job characteristics, feelings of empowerment, and intrinsic motivation: A multidimensional model. *Journal of Applied Social Psychology, 27*(14), 1222-1240.

Gambetta, D. (1988). Can we trust trust? In D. Gambetta. (Ed.), *Trust: Making and breaking cooperative relations* (pp. 213-237). Oxford, UK: Basil Blackwell.

Gandz, J. (1990). The employee empowerment era. *Business Quarterly, 55*(2), 74.

Gecas, V. (1989). The social psychology of self-efficacy. *Annual Review of Sociology, 15*, 291-316.

Gibb, J. R. (1965). Fear and facade: Defensive management. In R. E. Farson (Ed.), *Science and human affairs* (pp. 46-48). Palo Alto, CA: Science and Behavior Books.

Gibb, J. R. (1978). *Trust: New view of personal and organizational development*. Los Angeles, CA: Guild of Tutors Press.

Gibson, C. (1991). An analysis of the concept of empowerment. *Journal of Advanced Nursing, 23*, 305-313.

Gilbert, J. A., & Tang, T. L.-P. (1998). An examination of organizational trust antecedents. *Public Personnel Management, 27*(3), 321.

Gilson, R. L., & May, D. R. (2005, April). *Innovation in work groups: A theory of group support for innovation.* Paper presented at the Midwest Academy of Management Conference, Chicago, IL.

Gist, M. E. (1987). Self-efficacy: Implications for organizational behavior and human resource management. *Academy of Management Review, 12*(3), 472-485.

Gist, M. E., & Mitchell, T. B. (1992). Self-efficacy: A theoretical analysis of its determinants and malleability. *Academy of Management Review, 17*(2), 183-211.

Golembiewski, R. T., & McConkie, M. (1975). The centrality of interpersonal trust in group processes. In C. L. Cooper (Ed.), *Theories of group processes* (pp. 131-185). New York, NY: Wiley.

Gómez, C., & Rosen, B. (2001). The leader-member exchange as a link between managerial trust and employee empowerment. *Group & Organization Management, 26*(1), 53-69.

Guskin, A. E., & Bassis, M. A. (1985). Leadership styles and institutional renewal. In R. M. Davis (Ed.), *New directions for higher education* (pp. 13-22). San Francisco, CA: Jossey-Bass.

Guy, M. E. (1993). Three steps forward, two steps backward: The status of women's integration into public management. *Public Administration Review, 53*(4), 285-292.

Hackman, J. R., & Oldham, G. R. (1980). *Work redesign*. Reading, MA: Addison-Wesley.

Hair, J. F. Jr., Anderson, R. E., Tatham, R. L., & Black, W. C. (1998). *Multivariate data analysis* (5th ed.). Upper Saddle River, NJ: Prentice Hall.

Harari, O. (2002). The trust factor. *Public Management, 84*(8), 6.

Havens, D. S., & Mills, M. E. (1992). Staff nurse empowerment: Current status and future projections. *Nursing Administration Quarterly, 16*(3), 58-64.

Hayes, R. L., & Lunsford, B. (1994). Elements of empowerment: Enhancing efforts for school renewal. *People & Education, 2*(1), 83.

Henkin, A. B. (in press). *Interpersonal and organizational trust: Relationships with teacher empowerment, commitment, and school reform*. The University of Iowa. Iowa City, IA.

Henkin, A. B., & Davis, J. (1991). Perceived organizational support for innovation in the high technology sector. *International Review of Modern Sociology, 21*, 73-91.

Henkin, A. B., Davis, J., & Singleton, C. (1993). Organizational support for innovation: Perceptions and perspectives. *Journal of Applied Social Sciences, 17*, 221-236.

Henkin, A. B., & Holliman, S. L. (2009). Urban teacher commitment: Exploring associations with organizational conflict, support for innovation, and participation. *Urban Education, 44*(2), 160-180.

Honold, L. (1997). A review of the literature on employee empowerment. *Empowerment in Organizations, 5*(4), 202-212.

Itzhaky, H., & York, A. S. (2000). Sociopolitical control and empowerment: An extended replication. *Journal of Community Psychology, 28*(4), 407-415.

Jansen, E., & Chandler, G. N. (1994). Innovation and restrictive conformity among hospital employees: Individual outcomes and organizational considerations. *Hospital & Health Services Administration, 39*(1), 63-80.

Jensen, J. A. (2006). *Support for innovation in schools: Effects of trust, empowerment, and work environment variables*. Unpublished doctoral dissertation, The University of Iowa, Iowa City.

Johnson-George, C., & Swap, W. C. (1982). Measurement of specific interpersonal trust: Construction and validation of a scale to assess trust in a specific other. *Journal of Personality and Social Psychology, 43*(6), 1306-1317. doi:10.1037/0022-3514.43.6.1306

Kanter, R. M. (1977). *Men and women of the corporation*. New York, NY: Basic Books.

Kanter, R. M. (1983). *The change masters: Innovations for productivity in the American corporation*. New York, NY: Simon and Schuster.

Kanter, R. M. (1988). Three tiers for innovation research. *Communication Research, 15*(5), 509-523.

Kanter, R. M. (1993). *Men and women of the corporation* (2nd ed.) New York, NY: Basic Books.

Kaplowitz, M. D., Hadlock, T. D., & Levine, R. (2004). A comparison of web and mail survey response rates. *Public Opinion Quarterly, 68*(1), 94-101. doi:10.1093/poq/nfh006

Karasek, R. (1990). Lower health risk with increased job control among white collar workers. *Journal of Organizational Behavior, 11*(3), 171-185.

Kerr, C., & Gade, M. (1987). Current and emerging issues facing American higher education. In P. G. Altbach & R. O. Berdahl (Eds.), *Higher education in American society* (pp. 129-138). Buffalo, NY: Prometheus Books.

King, C. V., & Delana, P. (2002). Web data collection: Reminders and their effect on response rates. *Journal of e-Commerce and Psychology, 3*(1 & 2), 12-34.

Kirkman, B. L., & Rosen, B. (1999). Beyond self-management: Antecedents and consequences of team empowerment. *Academy of Management Journal, 42*, 58-74.

Kittleson, M. J., & Brown, S. L. (2005). E-mail versus web survey response rates among health education professionals. *American Journal of Health Studies, 20*(1/2), 7-14.

Kleinbaum, D. G., Kupper, L., Muller, K., & Nizam, A. (1998). *Applied regression analysis and multivariate methods* (3rd ed.). Pacific Grove, CA: Duxbury.

Knapp, L. G., Kelly-Reid, J. E., Ginder, S. A., & National Center for Education, S. (2009). *Employees in postsecondary institutions, fall 2008, and salaries of full-time instructional staff, 2008-09. First look.* Washington, DC.: National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education.

Knight, K. E. (1967). A descriptive model of the intra-firm innovation process. *Journal of Business, 40*(4), 478-196.

Knight, P., & Trowler, P. (2001). *Departmental leadership in higher education*. Buckingham, UK: Open University Press/SRHE.

Knol, J., & Van Linge, R. (2009). Innovative behaviour: The effect of structural and psychological empowerment on nurses. *Journal of Advanced Nursing, 65*(2), 359-370.

Koberg, C. S., Boss, R. W., Senjem, J. C., & Goodman, E. A. (1999). Antecedents and outcomes of empowerment: Empirical evidence from the health care industry. *Group Organization Management, 24*(1), 71-91.

Kopelman, R. E., Brief, A. P., & Guzzo, R. A. (1990). The role of climate and culture in productivity. In B. Schneider (Ed.), *Organizational climate and culture* (pp. 319-334) San Francisco, CA: Jossey-Bass.

Kotze, E., Menon, S. T., & Vos, B. (2007). Psychological empowerment in the South African military: The generalisability of Menon's scale. *SA Journal of Industrial Psychology, 33*(2), 1-6.

Kraimer, M. L., Seibert, S. E., & Liden, R. C. (1999). Psychological empowerment as a multidimensional construct: A test of construct validity. *Educational and Psychological Measurement, 59*(1), 127-142.

Kramer, M., & Schmalenberg, C. (1993). Learning from success: Autonomy and empowerment. *Nursing Management, 24*(5), 58.

Laschinger, H. K. S., Finegan, J., Shamian, J., & Casier, S. (2000). Organizational trust and empowerment in restructured healthcare settings: Effects on staff nurse commitment. *Journal of Nursing Administration September, 30*(9), 413-425.

Laschinger, H. K. S., Finegan, J., Shamian, J., & Wilk, P. (2001). Impact of structural and psychological empowerment on job strain in nursing work settings: Expanding Kanter's model. *Journal of Nursing Administration May, 31*(5), 260-272.

Laschinger, H. K. S., & Shamian, J. (1994). Staff nurses' and nurse managers' perceptions of job-related empowerment and managerial self-efficacy. *Journal of Nursing Administration, 24*(10), 38-47.

Lawler, E. E. (1986). *High-involvement management: Participative strategies for improving organizational performance* (1st ed.). San Francisco, CA: Jossey-Bass.

Lewis, J. D., & Weigert, A. (1985). Trust as a social reality. *Social Forces, 63*(4), 967-985. doi:10.2307/2578601

Liden, R.C., & Arad, S. (1996). A power perspective of empowerment and work groups: Implication for HRM research. In G. R. Ferris (Ed.), *Research in personnel and HRM* (Vol. 14, pp. 205-252). Greenwich, CT: JAI Press.

Liden, R. C., Wayne, S. J., & Sparrowe, R. T. (2000). An examination of the mediating role of psychological empowerment on the relations between the job, interpersonal relationships, and work outcomes. *Journal of Applied Psychology, 85*(3), 407-416. doi:10.1037/0021-9010.85.3.407

Liebmann, J. D. (1986, June). *Non-academic employees in higher education: A historical overview.* Paper presented at the 1986 Annual Forum of the Association for Institutional Research, Orlando, FL.

Locke, E. A., Frederick, E., Lee, C., & Bobko, P. (1984). Effect of self-efficacy, goals, and task strategies on task performance. *Journal of Applied Psychology, 69*(2), 241-251.

Luhmann, N. (1979). *Trust and power: Two works*. New York, NY: Wiley.

Manojlovich, M. (2007). Power and empowerment in nursing: Looking backward to inform the future. *Online Journal of Issues in Nursing, 12*(1), 15-15.

Mansfield, E. (1963). Size of firm, market structure, and innovation. *Journal of Political Economy, 71*(6), 556-576.

Mathieu, J. E., Gilson, L. L., & Ruddy, T. M. (2006). Empowerment and team effectiveness: An empirical test of an integrated model. *Journal of Applied Psychology, 91*(1), 97-108.

Mathisen, G. E., & Einarsen, S. (2004). A review of instruments assessing creative and innovative environments within organizations. *Creativity Research Journal, 16*(1), 119-140.

May, R. (1969). *Love and will*. New York, NY: Norton.

Mayer, R. C., Davis, J. H., & Schoorman, F. D. (1995). An integrative model of organizational trust. *Academy of Management Review, 20*(3), 709-734.

Maynard, M. T., Mathieu, J. E., Marsh, W. M., & Ruddy, T. M. (2007). A multilevel investigation of the influences of employees' resistance to empowerment. *Human Performance, 20*(2), 147-171. doi: 10.1080/08959280701332885

McAllister, D. J. (1995). Affect- and cognition-based trust as foundations for interpersonal cooperation in organizations. *Academy of Management Journal, 38*(1), 24-59.

McCauley, D. P., & Kuhnert, K. W. (1992). A theoretical review and empirical investigation of employee trust in management. *Public Administration Quarterly, 16*(2), 265-285.

McCune, J. C. (1998). That elusive thing called trust. *Management Review, 87*(7), 10.

McKnight, D. H., & Chervany, N. L. (1996). *The meanings of trust.* Technical Report MISRC Working Paper Series 96-04. Minneapolis, MN: University of Minnesota.

McKnight, D. H., Cummings, L. L., & Chervany, N. L. (1998). Initial trust formation in new organizational relationships. *Academy of Management Review, 23*(3), 473-490.

McMillan, J. H., & Schumacher, S. S. (1997). *Research in education: A conceptual introduction*. New York, NY: Longman.

Menon, S. T. (2001). Employee empowerment: An integrative psychological approach. *Applied Psychology: An International Review, 50*(1), 153.

Mishra, A. K., & Spreitzer, G. M. (1998). Explaining how survivors respond to downsizing: The roles of trust, empowerment, justice, and work redesign. *Academy of Management Review, 23*(3), 567-588.

Mishra, J., & Morrissey, M. A. (1990). Trust in employee/employer relationships: A survey of West Michigan managers. *Public Personnel Management, 19*(4), 443.

Mohamed, M. Z., & Rickards, T. (1996). Assessing and comparing the innovativeness and creative climate of firms. *Scandinavian Journal of Management, 12*(2), 109-121. doi: 10.1016/0956-5221(96)00003-6

Moorman, C., Zaltman, G., & Deshpande, R (1992). Relationships between providers and users of market research: The dynamics of trust within and between organizations. *Journal of Marketing Research, 29*(3), 314-328.

Moran, E. T., & Volkwein, J. F. (1988). Examining organizational climate in institutions of higher education. *Research in Higher Education, 28*(4), 367-383.

Moye, M. (2003). *The relationship of empowerment and commitment to the organization, to interpersonal- and system-level trust.* Unpublished doctoral dissertation, The University of Iowa, Iowa City.

Moye, M. J., Henkin, A. B., & Egley, R. J. (2005). Teacher-principal relationships: Exploring linkages between empowerment and interpersonal trust. *Journal of Educational Administration, 43*(3), 260-277.

Neal, J. G., & Steele, P. A. (1994). Empowerment, organization and structure: The experience of the Indiana University libraries. *Journal of Library Administration, 19*(3), 81-96.

Neilson, E. (1986). Empowerment strategies: Balancing authority and responsibility. In S. Srivastva and Associates (Eds.), *Executive power* (pp. 78-110). San Francisco, CA: Jossey-Bass.

Neter, J., Kutner, M. H., Nachtsheim, C. J., & Wasserman, W. (1996). *Applied linear statistical models* (4th ed.). Chicago, IL: Irwin.

Nunnally, J. C. (1967). *Psychometric theory.* New York, NY: McGraw-Hill.

Oreg, S. (2006). Personality, context, and resistance to organizational change. *European Journal of Work & Organizational Psychology, 15*(1), 73-101.

Orpen, C. (1990). Measuring support for organizational innovation: A validity study. *Psychological Reports, 67*, 417-418.

Parsons, T. (1951). *The social system*. New York, NY: Free Press.

Patrick, A., & Laschinger, H. K. S. (2006). The effect of structural empowerment and perceived organizational support on middle level nurse managers' role satisfaction. *Journal of Nursing Management, 14*(1), 13-22.

Pedhazur, E. J. (1997). *Multiple regression in behavioral research: Explanation and prediction* (3rd ed.). Fort Worth, TX: Holt, Rinehart & Winston.

Perry, C., LeMay, N., Rodway, G., Tracy, A., & Galer, J. (2005). Validating a work group climate assessment tool for improving the performance of public health organizations. *Human Resources for Health, 3*, 10.

Peterson, M. W., & White, T. H. (1992). Faculty and administrator perceptions of their environments: Different views or different models of organization? *Research in Higher Education, 33*(2), 177-204.

Peterson, N. A., & Speer, P. W. (2000). Linking organizational characteristics to psychological empowerment: Contextual issues in empowerment theory. *Administration in Social Work, 24*(4), 39.

Petter, J., Byrnes, P., Choi, D., Fegan, F., & Miller, R. (2002). Dimensions and patterns in employee empowerment: Assessing what matters to street-level bureaucrats. *Journal of Public Administration Research and Theory, 12*(4), 377-401.

Pierce, J. L., & Delbecq, A. L. (1977). Organization structure, individual attitudes and innovation. *Academy of Management Review, 2*(1), 27-37.

Pitman, T. (2000). Perceptions of academics and students as customers: A survey of administrative staff in higher education. *Journal of Higher Education Policy & Management, 22*(2), 165-175. doi: 10.1080/13600800050196876

Pitts, D. W. (2005). Leadership, empowerment, and public organizations. *Review of Public Personnel Administration, 25*(1), 5-28. doi: 10.1177/0734371x04271293

Price, J. L., & Mueller, C. W. (1986). *Handbook of organizational measurement*. Marshfield, MA: Pitman

Procter, S. Currie, G., & Orme, H.(1999). A study of the empowerment of middle managers in a health trust. *Personnel Review*, *28*(3), 242-257.

Putten, J. V., McLendon, M. K., & Peterson, M. W. (1997). Comparing union and nonunion staff perceptions of the higher education work environment. *Research in Higher Education, 38*(1), 131-149.

Quinn, R. E., & Spreitzer, G. M. (1997). The road to empowerment: Seven questions every leader should consider. *Organizational Dynamics, 26*(2), 37-49.

Reardon, K. K., & Enis, B. (1990). Communication forum: Establishing a companywide customer orientation through persuasive internal marketing. *Management Communication Quarterly, 3*(3), 376-387. doi: 10.1177/0893318990003003005

Redmon, T. (1982). Policy and academic innovation: An old vehicle with a new passenger. *College Board Review* (124), 19-22.

Redmond, M. R., Mumford, M. D., & Teach, R. (1993). Putting creativity to work: Effects of leader behavior on subordinate creativity. *Organizational Behavior and Human Decision Processes, 55*(1), 120-151. doi: DOI: 10.1006/obhd.1993.1027

Rhoades, L., & Eisenberger, R. (2002). Perceived organizational support: A review of the literature. *Journal of Applied Psychology, 87*(4), 698-714. doi:10.1037/0021-9010.87.4.698

Rowe, L. A., & Boise, W. B. (1974). Organizational innovation: Current research and evolving concepts. *Public Administration Review, 34*(3), 284-293.

Ryles, S. M. (1999). A concept analysis of empowerment: Its relationship to mental health nursing. *Journal of Advanced Nursing, 29*(3), 600-607.

Schmitt, N. (1996). Uses and abuses of coefficient alpha. *Psychological Assessment, 8,* 350-353.

Schneider, B., & Rentsch, J. (1988). Managing climates and cultures: A future perspective. In J. Hage (Ed.), *The future of organization* (pp.181-200). Lexington, MA: Lexington Books.

Scott, S. G., & Bruce, R. A. (1994). Determinants of innovative behavior: A path model of individual innovation in the workplace. *The Academy of Management Journal, 37*(3), 580-607.

Seibert, S. E., Silver, S. R., & Randolph, W. A. (2004). Taking empowerment to the next level: A multiple-level model of empowerment, performance, and satisfaction. *Academy of Management Journal, 47*(3), 332-349.

Seymour, D. T. (1988). *Developing academic programs: The climate for innovation*. ASHE-ERIC Higher Education Reports. Washington, DC: The George Washington University. (ERIC Document Reproduction Service No. ED305015)

Shapiro, S. P. (1987). The social control of impersonal trust. *American Journal of Sociology, 93*, 623-658.

Siegall, M., & Gardner, S. (2000). Contextual factors of psychological empowerment. *Personnel Review, 29*(6), 703-722. doi:10.1108/00483480010296474

Siegel, S. M., & Kaemmerer, W. F. (1978). Measuring the perceived support for innovation in organizations. *Journal of Applied Psychology, 63*(5), 553-562.

Sills, S. J., & Song, C. (2002). Innovations in survey research: An application of web-based surveys. *Social Science Computer Review, 20*(1), 22-30. doi: 10.1177/089443930202000103

Sitkin, S. B., & Pablo, A. L. (1992). Reconceptualizing the determinants of risk behavior. *Academy of Management Review, 17*(1), 9-38.

Sitkin, S. B., & Roth, N. L. (1993). Explaining the limited effectiveness of legalistic "remedies" for trust/distrust. *Organization Science, 4*(3), 367-392.

Smerek, R., & Peterson, M. (2007). Examining Herzberg's theory: Improving job satisfaction among non-academic employees at a university. *Research in Higher Education, 48*(2), 229-250.

Spreitzer, G. M. (1992). *When organizations dare: The dynamics of individual empowerment in the workplace*. Unpublished doctoral dissertation, The University of Michigan, Ann Arbor.

Spreitzer, G. M. (1995). An empirical test of a comprehensive model of intrapersonal empowerment in the workplace. *American Journal of Community Psychology, 23*(5), 601-629. doi: 10.1007/BF02506984

Spreitzer, G. M. (1996). Social structural characteristics of psychological empowerment. *Academy of Management Journal, 39*(2), 483-504.

Spreitzer, G. M. (1997). Toward common ground in defining empowerment. In R. W. Woodman & W. A. Pasmore (Eds.), *Research in organizational change and development*. Greenwich, CT: JAI Press.

Spreitzer, G. M. (2006). Empowerment. In S. Rogelberg (Ed.), *Encyclopedia of industrial and organizational psychology* (pp. 202-206). Thousand Oaks, CA: Sage Publications.

Spreitzer, G. M. (2007). Taking stock: A review of more than twenty years of research on empowerment at work. In C. Cooper & J. Barling (Eds.), *The handbook of organizational behavior* (pp. 54-73). Thousand Oaks, CA: Sage Publications.

Spreitzer, G. M., & Doneson, D. (2008). Musings on the past and future of employee empowerment. In T. Cummings (Ed.) *Handbook of organizational development* (pp. 311-324). Thousand Oaks, CA: Sage Publications.

Spreitzer, G. M., Noble, D. S., Mishra, A. K., & Cooke, W. N. (1999). Predicting process improvement team performance in an automotive firm: Explicating the roles of trust and empowerment. In E. Mannix & M. Neale (Eds.), *Research on managing groups and teams* (Vol. 2, pp. 71-92). Greenwich, CT: JAI Press.

SPSS Base 10.0 Applications Guide. (1999). Chicago, IL: SPSS Inc.

Streiner, D. (2005). Finding our way: An introduction to path analysis. *Canadian Journal of Psychiatry*, *50*(2), 115-122.

Tabachnick, B. G., & Fidell, L. S. (1989). *Using multivariate statistics* (2nd ed.). New York, NY: Harper Collins.

Taborda, C. (2000). Leadership, teamwork, and empowerment: Future management trends. *Cost Engineering*, *42*(10), 41-44.

Tan, H. H., & Tan, C. S. F. (2000). Toward the differentiation of trust in supervisor and trust in organization. *Genetic, Social & General Psychology Monographs, 126*(2), 241.

Tarnowski, G., & Van Ess Coeling, H. (1994). Outcomes of nurses' job satisfaction. *Journal of Nursing Administration*, *24*(11), 36-41.

Taylor, R. G. (1990, Fall). Trust and influence in the workplace. *Organization Development Journal, 8*, 33-36.

Tesluk, P. E., Farr, J. L., & Klein, S. R. (1997). Influences of organizational culture and climate on individual creativity. *Journal of Creative Behavior, 31*(1), 27-41.

Thomas, R., & Dunkerley, D. (1999). Careering downwards? Middle managers' experiences in the downsized organization. *British Journal of Management, 10*(2), 157-169.

Thomas, K.W., Jansen, E., & Tymon, W.G. (1997). Navigating in the realm of theory: An empowering view of construct development. *Recent Advances in Organizational Development, 10,* 1-30.

Thomas, K. W., & Velthouse, B. A. (1990). Cognitive elements of empowerment: An "interpretive" model of intrinsic task motivation. *The Academy of Management Review, 15*(4), 666-681.

Thompson, V. A. (1965). Bureaucracy and innovation. *Administrative Science Quarterly, 10*(1), 1-20.

Thorlakson, A. J. H., & Murray, R. P. (1996). An empirical study of empowerment in the workplace. *Group Organization Management, 21*(1), 67-83. doi: 10.1177/1059601196211004

Tschannen-Moran, M., & Hoy, W. K. (2000). A multidisciplinary analysis of the nature, meaning, and measurement of trust. *Review of Educational Research, 71,* 547-593.

Tyler, T. R., & Kramer, R. (1996). Whither trust? In R. Kramer & T. R. Tyler (Eds.), *Trust in organizations* (pp. 1-15). Thousand Oaks, CA: Sage.

Vardi, Y. (2000). Psychological empowerment as a criterion for adjustment to a new job. *Psychological Reports, 87*(3), 1083-1093.

Wageman, R. (1997). Critical success factors for creating superb self-managing teams. *Organizational Dynamics, 26*(1), 49-61.

Wallach, V. A., & Mueller, C. W. (2006). Job characteristics and organizational predictors of psychological empowerment among paraprofessionals within human service organizations: An exploratory study. *Administration in Social Work, 30*(1), 95-115.

Weick, K. E. (1976). Educational organizations as loosely coupled systems. *Administrative Science Quarterly, 21*(1), 1-19.

West, M. A. (1990). The social psychology of innovation in groups. In M. A. West & J. L. Farr (Eds.), *Innovation and creativity at work: Psychological and organizational strategies* (pp. 309-333). Chichester, UK: John Wiley & Sons.

West, M. A., & Anderson, N. R. (1994). *Predicting innovation in team at work: A test of the theory of group innovation.* Unpublished manuscript. Memo No. 1308. MRC/ESRC Social and Applied Psychology Unit, University of Sheffield, UK.

West, M. A., & Farr, J. L. (1990). Innovation at work. In M. A. West & J. L. Farr (Eds.), *Innovation and creativity at work: Psychological and organizational strategies* (pp. 3-13). Chichester, UK: John Wiley & Sons.

Wilkinson, A. (1998). Empowerment: Theory and practice. *Personnel Review, 27*(1/2), 40.

Wilson, J. Q. (1966). Innovation in organization: Notes toward a theory. In J. D. Thompson (Ed.), *Approaches to organization design* (pp. 193-218). Pittsburgh, PA: University of Pittsburgh Press.

Wimmer, R. D., & Dominick, J. R. (2000). *Mass media research: An introduction* (6th ed.). Belmont, CA: Wadsworth Publishing Company.

Woodman, R. W., Sawyer, J. E., & Griffin, R. W. (1993). Toward a theory of organizational creativity. *The Academy of Management Review, 18*(2), 293.

Woolsey, R. (1997). Building high trust organizations. *Supervision, 58*(9), 12-15.

Yoder, J. D., & Kahn, A. S. (1992). Toward a feminist understanding of women and power. *Psychology of Women Quarterly, 16*(4), 381-388.

Young, J. (1993). *Managers' and nonmanagers' perceived support for innovation present in a large Alabama aerospace company*. Unpublished doctoral dissertation, University of Alabama, Tuscaloosa.

Zaltman, G., Duncan, R., & Holbek, J. (1973). *Innovations and organizations*. New York, NY: John Wiley & Sons.

Zimmerman, M. A. (1995). Psychological empowerment: Issues and illustrations. *American Journal of Community Psychology, 23*(5), 581-599. doi: 10.1007/BF02506983

Zusman, A. (2005). Challenges facing higher education in the twenty-first century. In P. G. Altbach, R. O. Berdahl & P. J. Gumport (Eds.), *American higher education in the twenty-first century: Social, political, and economic challenges* (2nd ed., pp. 115-160). Baltimore, MD: Johns Hopkins University.