RELATIONSHIPS AMONG NON-ACADEMIC EMPLOYEE PERCEPTIONS OF MANAGER LEADERSHIP BEHAVIORS, MEANINGFUL WORK, AND SELECTED PERFORMANCE DRIVERS

A Dissertation

by

LAURA RENAY HAMMONS

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Chair of Committee,	Fredrick Nafukho
Co-Chair of Committee,	Homer Tolson
Committee Members,	Kelli Peck-Parrott
	Ben Welch
Head of Department,	Fredrick Nafukho

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ABSTRACT

U.S. public institutions of higher education are unique work environments that employ millions of faculty, staff, and administrators. Reported research on human resource issues for non-academic employees within higher education, however, is scarce. Given that staff who work in higher education are increasingly being asked to perform at higher levels with equal or fewer resources, research is needed as to how these outcomes can be achieved. The purpose of this study was to determine to what extent non-academic middle manager participative and supportive leadership behaviors are related to employee perceptions of meaningful work (conceptualized as growth satisfaction, empowerment, person-job fit, and affiliation commitment) and to employee learning goal orientation, organizational citizenship behavior, and intention to turnover.

A population of 4,235 employees within a large public institution of higher education in the southwestern part of the United States was asked to participate in an online survey. The survey was comprised of items from eight validated instruments with 45 items and additional demographic information. Respondents totaled 1,333 (31.5%). Data were analyzed using descriptive statistics, Cronbach's alpha coefficient for reliability, exploratory factor analysis, and structural equation modeling techniques.

Results of the study led to revisions of the initially proposed constructs via exploratory factor analysis, giving rise to seven constructs: Cooperative Leader Behavior, Work Fulfillment and Identity, Work Influence and Affiliation, Learning Goal Orientation, Personal Industry, Interpersonal Helping, and Intention to Turnover.

Evaluation of the structural model for the revised constructs, with one added path, resulted in good fit (χ^2=3246.397 [796]=4.078, p=.000; CFI=.941; TLI=.936; RMSEA .048; SRMR=.051**)**. Cooperative Leader Behavior was significantly and positively related to employee perceptions of Work Fulfillment and Identity (β=.517, p<.05) and Work Influence and Affiliation (β=.643, p<.05). Cooperative Leader Behavior, Work Fulfillment and Identity, and Work Influence and Affiliation were significantly and negatively related to Intention to Turnover (β=-.436, p<.05; β=-.480, p<.05; β=-.293, p<.05, respectively). Work Fulfillment and Identity was significantly and positively related to Learning Goal Orientation (β=.261, p<.05) and Personal Industry (β=.309, p<.05). Work Influence and Affiliation was significantly and positively related to Interpersonal Helping (β=.274, p<.05). Finally, Work Fulfillment and Identity and Work Influence and Affiliation had a significant bi-directional relationship (β=.848, p<.05).

Conclusions drawn from the results of this study led to, 1) recommendations and implications for the training and development of middle managers, 2) recommendations and implications for theory and research, and 3) recommendations and implications for practice. Higher education institutions that desire to foster employee perceptions of meaningful work and influence performance drivers such as intention to turnover should focus on developing middle-manager cooperative leadership behaviors. Additional research is needed to continue to revise, refine and validate the new constructs identified in this study, as well as to identify additional performance drivers in higher education responsive to cooperative leader behavior.

DEDICATION

To God and my family.

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CHAPTER I

INTRODUCTION

Does meaningful work make a difference in the higher education workplace, and can middle managers impact employee perceptions of work as meaningful? What, in fact, is the role of the middle manager, and what drives performance in higher education? The purpose of this study was to explore the relationships among non-academic middle manager leadership behaviors, employee perceptions of meaningful work, and selected performance drivers in the context of a higher education institution within the United States (see Figure 1). Path-goal leadership, meaningful work, and literature regarding the higher education context and higher education middle managers served as the theoretical lens for this study.

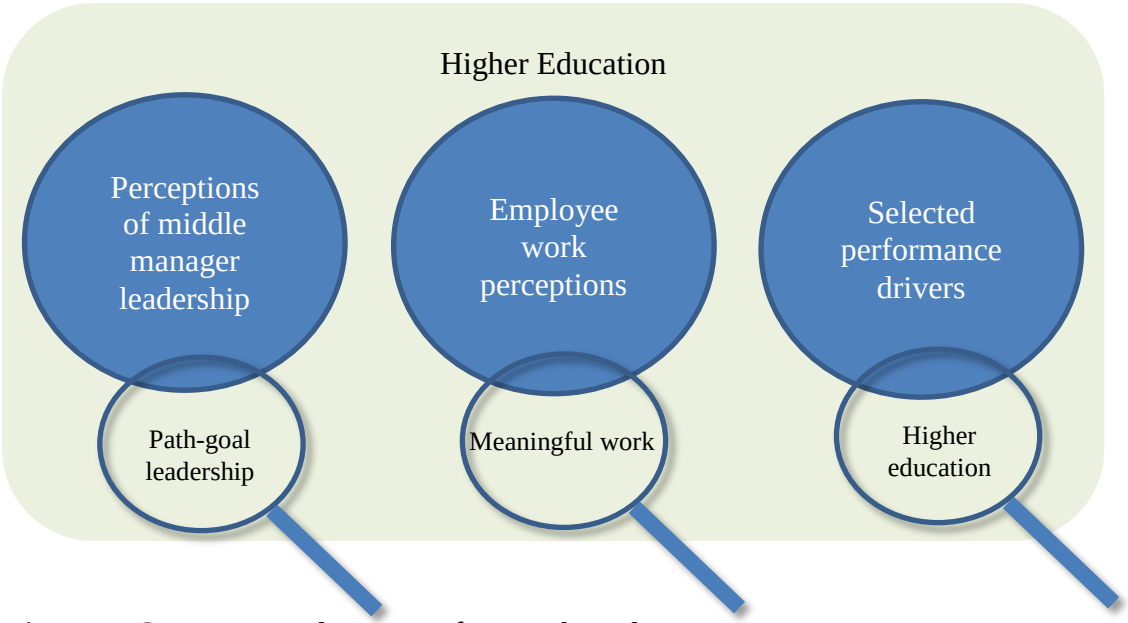

Figure 1. Constructs and context of research study**.**

With over 4,000 accredited institutions of higher education in the United States (U.S.), employing over 3.5 million faculty, administrators, and other staff persons, higher education is a major employment sector (Jo, 2008; Knapp, Kelley-Reid, & Ginder, 2010). Higher education, with its mix of academic, professional, and support staff (along with a multi-focused mission on teaching, research, and service) is a complex organization and highly bureaucratic. In spite of these facts, human resource and personnel issues in higher education have garnered only moderate attention in the research literature (Jo, 2008).

According to Johnsrud and Rosser (2000), middle managers are a significant force in higher education, serving in key roles such as student services (e.g., student affairs, international student advising, student health services), administrative (e.g., finance, IT, human resources), and academic support services (e.g., academic advising, undergraduate studies, graduate studies), as well as external affairs (e.g., development). Because of their boundary-spanning role among faculty, students, and the larger community (as well as between line staff and higher level administrators), middle managers have great potential to influence the performance and overall perception held of their unit and the institution as a whole. What was noted by Johnsrud and Rosser in 2000 still holds true – based on higher education literature, there is still limited understanding about this critical group of administrators – their roles, responsibilities, skills, training needs, and career pathways. In the context of this research, it could also be said that little is understood about their direct and indirect contributions to higher education (Volkwein & Parmley, 2000).

The researcher, in this study, sought to address a gap in higher education middle management literature. Specifically, the researcher examined the perceived leader behaviors of non-academic middle managers in higher education through the lens of path-goal leadership, which purports that leadership should motivate or eliminate barriers in order to achieve desirable work outcomes. Further, the impact of perceived middle manager leadership behaviors on employee perceptions of their development and growth; sense of community; purpose and impact; and, feelings of achievement through the lens of meaningful work was explored in this study. Finally, the researcher attempted to determine if effective leadership behaviors and employee positive perceptions of work lead to improvement in factors that drive performance in the highly bureaucratic, unique work environment that is higher education.

Study Rationale

Public institutions of higher education are unique work environments that employ both academic (faculty) and non-academic individuals. While front-line staff are generally non-academic and executive levels of administration are comprised primarily of faculty administrators, middle managers may include a mixture of both tenure-track faculty and non-academic supervisors. Higher education non-academic middle managers, in particular, constitute a group that is under researched in comparison with their corporate cousins or with executive leadership levels within higher education, such as presidents and deans (Perrakis, Galloway, Hayes, & Robinson-Galdo, 2011; Raes, Heijltjes, Glunk, & Roe, 2011; Rosser, Johnsrud, & Heck, 2003; Volkwein & Parmley, 2000).

Middle managers in higher education serve as crucial connections in navigating the complex bureaucracy. As a result of their central placement, they often link the organizational goals to process/team and individual goals. Furthermore, middle managers communicate critical information between executive level administration and line employees (White, Webb, & Young, 1990).

Middle managers play important roles in the levels of motivation and job satisfaction of employees. Egan (2008) and Lok, Westwood, and Crawford (2005) found that organization sub-culture has greater influence on motivational factors such as transfer of learning and organizational commitment than does the larger organizational culture, suggesting that middle managers greatly influence the attitudes and behaviors held by employees. According to a study by Smerek and Peterson (2007), the work itself, effective supervisors, and effective senior managers were the most heavily weighted predictors of job satisfaction amongst non-academic employees at a large, public research university. Given the high influence of middle managers at the subculture level, it follows that researchers and administrators need to increase their understanding of the role these individuals play in creating and shaping work environments for maximum effectiveness.

Following previous research on the importance of the immediate work environment on employee perceptions (Egan, 2008; Lok et al., 2005; Smerek & Peterson, 2007), this researcher contends that, middle managers play a critical role, and have the potential to make an impact on a wide range of organizational factors, through the exercise of effective leadership. With the public and government calling for greater

accountability in higher education (evidenced by increasing requirements for federal reporting and the integration of higher levels of assessment into accreditation processes), and with the increasing challenges in the environment (as a result of changing technologies, globalization, budget constraints, and greater competition), further research is needed on the impact of managerial leader behaviors on motivational factors and performance drivers in higher education (Rosser, Johnsrud, & Heck 2003).

Problem Statement

As noted previously, higher education is a unique organizational context. What draws employees to work and remain in higher education can be varied, but generally does not include expectations for high prestige, quick advancement, or competitive salaries as may be the case for those who work in corporate America (Foldesi, Smith, & Toller, 2002). Although there is evidence in the research literature that social aspects of the workplace, rather than the work itself, result in the primary sources of job satisfaction for public (including university) employees (Emmert & Taher, 1992; Volkwein & Parmley, 2000), Smerek and Peterson (2007) suggested that employees in higher education are likely drawn for reasons of stability, security, reasonable benefits, meaningful work, and work-family balance. Volkwein and Zhou (2003) confirmed that, among three forms of satisfaction (intrinsic, extrinsic, and interpersonal), intrinsic satisfaction (representing employee perceptions of accomplishment, autonomy, creativity, initiative, and challenge) is the largest predictor of overall satisfaction for university administrators. Few researchers, however, have gone beyond examining satisfaction levels of university employees in order to make connections with work-

related outcomes such as performance and performance drivers (Volkwein & Parmley, 2000; Volkwein & Zhou, 2003).

Furthermore, according to literature on professional, non-academic staff employed in higher education, non-academic employees generally "fall into" higher education careers like student affairs following college graduation, rather than arrive through intentional career planning (Wood & Kia, 2000). Because of the differences in employment and career expectations, as well as the unique backgrounds of those employed in higher education, it is important to explore the relationship between leadership behaviors and selected performance drivers directly within the context of higher education rather than assume that prior studies from other organizational contexts can be generalized to this environment.

Additionally, the impact of middle management leader behavior on organizational effectiveness within higher education is unclear. In a 2010 survey within the state of Texas (Survey of Organizational Excellence, 2010), it was reported that employees were relatively satisfied with a number of aspects of their work environment (supervisor, job satisfaction, fairness, etc.); however, there are no reported data which link these constructs (or their corresponding levels) to organizational characteristics or individual employee behaviors. Human resource scholars and practitioners, as well as higher education administrators, need greater clarity into this potential relationship.

Finally, among the plethora of leadership theories, participative and supportive leader behaviors (through the lens of the path-goal theory of leadership) show promise in counteracting the effects of highly bureaucratic and political organizations and for

addressing the current challenges in the landscape of higher education. There is a dearth of existing studies that provide clear evidence that participative and supportive leader behaviors in higher education relate to the outcomes necessary to overcome these challenges, thus this research was undertaken to address the current gap.

In summary, the key issues that provoked this research included, 1) a lack of research which focused on the perception of leader behaviors of non-academic middle managers in higher education and, 2) an identified need to go beyond studies on job satisfaction and fill a gap in the literature, linking non-academic middle manager leadership behavior to selected performance drivers through employee perceptions of meaningful work.

Purpose of the Study

The purpose of this study was to examine the relationships between perceived leader behavior (hereafter referred to simply as leader behavior or leadership behavior), meaningful work, and selected performance drivers as reported by employees in a four-year public institution of higher education within the southwestern United States. The leader behaviors examined in this study included participative and supportive leadership. Employee perceptions of meaningful work were measured by four latent constructs: growth satisfaction, person-job fit, empowerment, and affiliation commitment. The higher education performance drivers studied included: learning goal orientation, organizational citizenship behavior, and intention to turnover.

Research Question

The research question explored in this dissertation, in order to investigate the associations among middle manager leadership behaviors and selected performance drivers was as follows:

> *What are the relationships between and among perceived participative and supportive leadership behaviors, employee perceptions of meaningful work, and selected performance drivers as reported by public higher education employees?*

Theoretical Framework

Path-Goal Leadership

Middle managers in higher education exert leadership as one aspect of their role. Leadership can be broadly described as an influence relationship between leaders and followers that results in certain outcomes (Rost, 1991). These outcomes can be explained by, 1) the dispositional characteristics and behaviors of the leader; 2) follower perceptions; 3) attributions of the follower; and, 4) the context where the relationship between leader and follower takes place (Antonakis, Cianciolo, & Sternberg, 2004). In other words, leaders (through various leadership styles) exert influence on followers (through perceptions and responsive behaviors) while working toward common goals. Leadership has long been purported to result in effective outcomes in organizations and be a critical skill for managers to develop and utilize. Individuals with highly developed leadership skills offer a competitive advantage for organizations by improving overall human capital (Bassi & McMurrer, 2008). Theories of leadership abound (Antonakis, Cianciolo, & Sternberg, 2004; Bass, 2008; Blake & Mouton, 1985; Blanchard, Zigarmi,

& Zigarmi, 1985; Greenleaf, 1983; House, 1971; Northouse, 2007). While organizational outcomes vary by theory, leadership (in a variety of leader/follower contexts) has been shown to impact selected performance drivers, including job satisfaction, motivation, and organization commitment, among many others (Northouse, 2007).

Leadership has been examined in a number of contexts including corporations, non-profits, governmental, and educational institutions (Koonce, 2010; Rosser, 2004; van Ameijde, Nelson, Billsberry, & van Meurs, 2009; Yip, Twohill, Ernst, & Munusamy, 2010). Leadership has been studied at a number of levels within academia: presidential leadership and academic leadership; in community colleges and research institutions (Ebbers, Conover, & Samuels, 2010; Röbken, 2007; Stephenson, 2011; Wolverton, Ackerman, & Holt, 2005). In spite of the fact that research on leadership in higher education has been active for decades, little research has been reported on leadership at the level of middle management, particularly for non-academic, non-tenure track positions.

The path-goal theory of leadership (House, 1996), grounded in expectancy theory of employee work motivations (Vroom, 1964), serves as a useful lens through which to understand the middle manager-employee relationship. In essence, managers strengthen the probability of achieving desirable goals, such as having employees display extra-role behaviors, by clarifying paths to reach these goals and meeting the motivational needs of employees. To the extent that managers utilize participative and supportive leader behaviors, employees can find motivation through engagement in meaningful work, and

may, in turn, reduce intention to turnovers, assume a learning goal orientation, and exhibit organizational citizenship behaviors.

Meaningful Work

Through the lens of meaningful work, individuals can be understood to seek four basic factors in work: 1) to develop and grow in the workplace; 2) to be part of a community with others; 3) to do something purposeful and make a difference; and, 4) to express their potential as they create, influence and achieve goals at work (Lips-Wiersma & Morris, 2009). The influence of participative and supportive leader behaviors on employee perceptions of these four factors, resulting in an overall perception of meaningful work was explored in this study. Furthermore, the extent to which positive employee perceptions would subsequently serve as a motivator for employees to engage in desirable behaviors (identified as performance drivers) was examined.

Previous researchers have identified that constructs similar to those representing meaningful work contribute to overall job satisfaction for university administrators in public and private institutions (Volkwein & Zhou, 2003). Volkwein and Zhou (2003) found that approximately 54% of the variance in overall satisfaction was predicted by six variables (in order of importance): Intrinsic Job Satisfaction (β=.426, $p<.001$), Job Insecurity (β=-.155, $p<.001$), Interpersonal Satisfaction (β=.150, $p<.001$), Job Stress/Pressure (β=-.122, $p<.001$), Extrinsic Satisfaction (β=.118, $p<.001$), and Administrative Teamwork (β=.083, $p<.001$). Intrinsic satisfaction (perceptions of accomplishment, autonomy, creativity, initiative, and challenge), interpersonal satisfaction (relationships with superiors, subordinates, students and colleagues; social

status; and, recognition), and possibly, administrative teamwork are descriptively similar to the Lips-Wiersma and Morris' (2009) conceptualization of meaningful work. Despite these findings, research linking leadership to perceptions of meaningful work for non-academic university employees and, ultimately, to performance or performance drivers in the higher education environment has not been identified.

Selected Performance Drivers in Higher Education

U.S. higher education prepares students, both academically and socially to meet the workforce demands of the nation; strives to advance thinking and knowledge in the disciplines; and, looks to address the needs of our communities, states, and nation. Stated more simply, higher education institutions pursue multiple missions of teaching, research, and service (Birnbaum, 1988). It is the faculty, administrators, and staff within these institutions who carry out these missions, serving a multitude of constituents in the process. To do so effectively, and within the constraints of limited budgets and opportunities for advancements, higher education managers must find means by which to motivate their employees to continually "learn, unlearn, and relearn" (Tofler, 1970, p. 367); accept challenging work; engage in behaviors that go beyond existing job descriptions; and persist with the organization (Johnsrud, Heck, & Rosser, 2000; Smerek & Peterson, 2007).

Intention to Turnover

Research in student affairs (where the majority of non-academic higher education research has arisen) over the past three decades provides evidence that morale and turnover are significant concerns in the field (Burns, 1982; Evans, 1988; Lorden, 1998;

Ward, 1995). Reasons for leaving include low pay, insufficient opportunities for advancement, and poor perceptions of the work environment (Evans, 1988; Hancock, 1988; Holmes, Vierrier, & Chisholm, 1983; Lorden, 1998). According to a study by Smerek and Peterson (2007), the work itself, effective supervisors, and effective senior managers were predictors of job satisfaction among non-academic employees at a large, public research university. Thus, one can hypothesize that retention would be impacted by middle manager leadership through employee perceptions of meaningful work.

Learning Goal Orientation

In addition to employee persistence, work performance is a critical factor in higher education. There are multiple models of performance and many ways to measure it. Holton (1999) proposed a comprehensive model of a performance system, consisting of several domains: mission, process, (internal) subsystem, and individual. Further, Holton differentiated between two measures of performance: outcomes (e.g., profit, return on investment, work output, etc.) and drivers (e.g., customer satisfaction levels, on-time delivery, ethical performance, etc.), which enable performance capacity.

In this study, learning goal orientation was used as an indicator of individual-level performance (Holton, 1999) and was considered a driver of performance outcomes. Goal orientation has been conceptualized in a number of ways, though most often as either learning or performance oriented. While employees with a learning goal orientation exhibit a desire to develop new skills in the workplace and accept challenging assignments (even when it may lead to failure), those with a performance

goal orientation tend to use work experiences to validate their existing competencies (VandeWalle, 2001).

With the high levels of bureaucracy and continuous change that characterize today's higher education environment, having employees learning goal-oriented is important. Learning, as a driver of performance outcomes, must be linked to organizational objectives (Rummler & Brache, 1995). Rummler and Brache (1995) included learning (i.e., attaining the necessary skills and knowledge to perform) as one of six critical components in the human performance system:

1. Performance specifications
2. Task support
3. Consequences
4. Feedback
5. Skills/knowledge
6. Individual capacity

These components work together to enhance performance at the individual level. Furthermore, VandeWalle and Cummings (1997) demonstrated that learning goal orientation was positively associated, while performance goal orientation was negatively associated, with feedback seeking. Feedback seeking behavior has, likewise, been associated with improved task performance (Butler, 1993), lessening uncertainty (Ashford, 1986) and aiding employee "newcomers" to learn how to perform in the job (Morrison, 1993).

Dalton (2003) outlined four essential supervisor tasks to improve group and team dynamics. These included helping new staff: 1) fulfill basic job responsibilities, 2) master job competencies, 3) understand, adjust, and be successful in their work environment, and 4) engage in continuous learning. Learning goal orientation, versus performance goal orientation, is, as a result, an essential individual-level performance driver for higher education employees (Holton, 1999). Holton (1999) affirmed that there is a need to focus on individual learning as a means improve individual performance, and ultimately, organizational performance.

Organizational Citizenship Behavior

Finally, high performing higher education employees must exhibit organizational citizenship behaviors. Organizational citizenship behaviors include those extra-role behaviors that positively impact the workplace, yet are not explicit employee expectations (Organ, 1988). According to Hermsen and Rosser (2008), strained budgets, along with a growth in responsibilities, are affecting the salaries and working conditions of higher education staff. Middle managers have limited influence on benefits, pay, and promotion; thus, they need to utilize other means to encourage performance above and beyond stated job descriptions. In an environment where budgets are shrinking, responsibilities and accountability are increasing, and change is inevitable, employees who go above and beyond expectations, as well as middle managers who elicit these responses, are critical to create high performance work environments.

Higher education is a performance system, and thus, can be viewed as consisting of four domains: mission, process, (internal) performance subsystem, and individual

(Holton, 1999). The mission of higher education has been described as being three fold: teaching, research, and service (Birnbaum, 1988). Innumerable processes and multiple subsystems exist to support these missions, from which are derived various outcomes, including number of faculty publications and awards, students graduated and employed, and technologies patented. To maximally support these University missions, institutions of higher education must focus on those processes/drivers which will enable it to achieve strategic outcomes: developing, retaining, and motivating high performing individuals who operate within each of the many performance subsystems.

Nafukho and Hinton (2003) agreed that employees are well positioned to impact practices that lead to high performance workplaces. Further, they offered that individual-level performance improvement (though not in isolation) is "the best approach to meet the competitive economic challenges" (p. 268). Good performance should be a product of individuals, focused on those skills required for workplace success, working in environments that are supportive (Nafukho & Hinton, 2003; Robinson & Robinson, 1996). In this study, non-academic middle manager leadership behaviors form the independent constructs that are hypothesized to support employee perceptions of meaningful work, from which are derived the selected performance drivers of learning goal orientation, organizational citizenship behavior, and lack of intention to turnover.

Research Hypotheses

As a result of prior research on the constructs of interest (explored in Chapter II), several hypotheses are offered (see the figure in Chapter II for a visual depiction of the hypothesized paths):

Hypothesis 1: The relationship between participative leadership behaviors and intention to turnover will be negative and significantly different from zero.

Hypothesis 2: The relationship between participative leadership behaviors and growth satisfaction will be positive and significantly different from zero.

Hypothesis 3: The relationship between participative leadership behaviors and perceived person-job fit will be positive and significantly different from zero.

Hypothesis 4: The relationship between participative leadership behaviors and empowerment (meaning and impact items) will be positive and significantly different from zero.

Hypothesis 5: The relationship between supportive leadership behaviors and growth satisfaction will be positive and significantly different from zero.

Hypothesis 6: The relationship between supportive leadership behaviors and affiliation commitment will be positive and significantly different from zero.

Hypothesis 7: The relationship between supportive leadership behaviors and intention to turnover will be negative and significantly different from zero.

Hypothesis 8: The relationship between growth satisfaction and learning goal orientation will be positive and significantly different from zero.

Hypothesis 9: The relationship between person-job fit and learning goal orientation will be positive and significantly different from zero.

Hypothesis10: The relationship between growth satisfaction and intention to turnover will be negative and significantly different from zero.

Hypothesis 11: The relationship between person-job fit and intention to turnover will be negative and significantly different from zero.

Hypothesis 12: The relationship between empowerment and intention to turnover will be negative and significantly different from zero.

Hypothesis 13: The relationship between affiliation commitment and organizational citizenship behavior will be positive and significantly different from zero.

Hypothesis 14: The relationship between affiliation commitment and intention to turnover will be negative and significantly different from zero.

Hypothesis 15: The relationship between growth satisfaction and person-job fit will be positive and significantly different from zero.

Significance of the Study

Non-academic middle managers, in this study, were hypothesized to play key roles in meeting the increased demands being placed on higher education, such as decreasing time to degree, increasing retention rates, providing high impact learning experiences, preparing students for an increasingly diverse and global workplace, demonstrating fiscal responsibility, procuring development funds, and many others. The importance of non-academic middle manager influence was based on 1) their positionality between line employees and higher levels of administration, 2) prior research, and 3) the ability to shape and guide their leadership behaviors through training.

Rosser (2000) indicated that, as a result of their roles and positionality, middle managers have great impact with respect to setting the tone for their functional unit and

the institution as a whole. They interact daily with staff, students, faculty, other administrators, and the larger external environment. Additionally, middle managers often mediate between higher levels of management and support and professional staff persons. In so doing, they have the potential to impact employee motivation to work, leading to improved performance. Despite the frequency with which researchers purport that middle managers in higher education influence institutional effectiveness and efficiency, limited empirical data known to the researcher are available to support this claim.

In a 2009-2010 study (Survey of Organizational Excellence, 2010) of 12 higher education institutions within state of Texas, it was reported that employees perceived adequate, though not excellent, levels of support in five dimensions: 1) work group (e.g., supervisor, team effectiveness, etc.); 2) accommodations (e.g., fair pay, benefits, employee development, etc.); 3) organizational features (e.g., change oriented, goal oriented, quality, etc.); 4) information (e.g., internal and external); and, 5) personal (e.g., job satisfaction, empowerment, burnout, etc.). On a scale from 100-500, with scores above 300 indicating that employees view a construct more positively than negatively, scores overall ranged from 289 (fair pay) to 387 (physical environment). The grand mean score was 364. Although useful for benchmarking, results of the survey offer little information regarding what can be done to improve employee attitudes and perceptions of workplace factors and no information concerning the impact of middle managers.

Finally, institutions invest significant amounts of time and money to develop in-house leadership training and development programs for middle managers and/or to send them to leadership-focused workshops, conferences, and programs offered through professional associations and other organizations. Although numerous reasons for investing in the professional development of middle managers are likely to exist, certainly one reason to do so is to enhance managerial and leadership skills in order to improve institutional operations. Without empirical data linking university selected performance drivers with higher education middle manager behavior, what assurances can institutions hold regarding the effectiveness of these programs? The researcher, in this study, addresses these needs by directly linking selected performance drivers to middle manager behaviors.

Results of this study can be used to benefit non-academic middle managers, illuminating whether or not participative and supportive leader behaviors positively influence employee perceptions of meaningful work. Human resource professionals and administrators, making decisions about leadership training, can also use the results of this study to better focus leadership training on leader behaviors that are shown to positively impact employee perceptions of the workplace and drive performance. Finally, the results of this study can be used by higher education and human resource development researchers seeking to better understand leader behavior, meaningful work, and performance drivers in an organizational (specifically, higher education) context.

Operational Definitions

On the following pages, definitions for the key terms, as well as the terminology/constructs which comprise the conceptual framework, are provided.

Affiliation Commitment: The presence of an emotional connection and feeling of belonging between an employee and organization or job (Rhoades, Eisenberger, & Armeli, 2001).

Empowerment: A state of mind wherein the individual feels motivated to and capable of influencing and impacting his/her immediate context (work or otherwise; Spreitzer, 1995). Empowered employees are given opportunities to grow, develop and apply their knowledge and skills to make a difference in the workplace.

Growth Satisfaction: A sense of accomplishment and worthwhile feeling derived from challenging experiences (Bottger & Chew, 1986).

Higher Education Middle Managers: Higher education middle manager, in the context of this study, refers to an individual in an academic or non-academic support role within the higher education institution (e.g., admissions, records, library, information technology, business/administrative services, research, etc.). This person generally supervises wage or professional staff and has influence in the strategic direction and goal setting of the institution (Rosser, 2000).

Human Resource Development (HRD): "HRD is a process of developing and unleashing expertise for the purpose of improving individual, team, work process, and organizational system performance." (Swanson & Holton, 2009, p. 4)

Intention to Turnover: Represents the future intent of an employee to remain with the organization or seek employment elsewhere, seen as a reliable predictor of actual future behavior (Carmeli & Wiesberg, 2006; Colarelli, 1984).

Leadership: "A process whereby an individual influences a group of individuals to achieve a common goal." (Northouse, 2007, p. 3) Bounded by this description, leadership encompasses 4 components: 1) a process, 2) the involvement of influence, 3) a group context, 4) and attention to goals.

Learning Goal Orientation: "A desire to develop the self by acquiring new skills, mastering new situations, and improving one's competence." (Vandewalle, 1997, p. 1000)

Meaningful Work: An intrinsic work motivator that goes beyond the values one holds, to something deeper (Chalofsky & Krishna, 2009). An individual's sense that, "their work matters, makes sense, is significant, and is worth engaging in at a deep personal level." (Steger & Dick, 2010, p. 132)

Organizational Citizenship Behavior (OCB): Extra-role, discretionary behaviors demonstrated in the workplace that extend beyond explicit job requirements or organizational policy and contribute to the effective functioning of the workplace. (Organ, 1988). For example, OCB would include helping, sharing, and volunteering.

Participative Leader Behavior: A leadership style characterized by the leader's active involvement of the follower in decision-making and problem solving processes (Wagner, 1994).

Performance: A multidimensional phenomenon which can be experienced within a performance system and can be viewed through the domains of mission, process, sub-system, and individual. Performance can be measured in terms of outcomes and drivers (Holton, 1999).

Performance Driver: A measure of performance that serves as a leading indicator of future performance outcomes. Performance drivers are, "expected to increase system, sub-system, process, or individual ability and capacity to be more effective or efficient in the future." (Holton, 1999, p. 104)

Performance Outcome: A measure of performance that reflects "effectiveness and efficiency relative to core outputs of the system, sub-system, process, or individual." (Holton, 1999, p. 104) Performance outcomes are often lag indicators and include measures such as profit, units produced, return-on-investment, etc.

Person-Job Fit: The level of congruency between a person's abilities or desires to the actual demands or attributes of the job (also referred to as perceived ability-job fit; Edwards, 1991).

Supportive Leader Behavior: A leadership style in which the leader actively demonstrates concern for the follower's needs, evidencing kindness, understanding, and openness toward the follower (House, 1971, 1996).

Organization of the Dissertation

In this chapter, the researcher has laid the groundwork for research on the relationships among non-academic higher education middle manager leadership, employee perceptions of meaningful work, and selected performance drivers. The

literature on middle managers in higher education, higher education as a workplace, path-goal leadership, and meaningful work are examined in Chapter II. In Chapter III, the researcher outlines the methods used to gather data from a sample of staff who report to non-academic middle managers in higher education, using eight existing survey instruments: the Path-Goal Leadership Questionnaire (PGLQ; lndvik's, 1985, 1988), the Job Diagnostic Survey (JDS; Hackman & Oldham, 1974), Empowerment at Work scale (Spreitzer, 1995), the affiliation commitment subscale of the Organizational Commitment instrument (Balfour & Wechsler, 1996) , Perceived Ability-Job Fit (P-J Fit) scale (Abdel-Halim, 1981), the empowerment subscale in the Work Domain Goal Orientation instrument (VandeWalle's, 1997), the interpersonal helping and personal industry subcales of the Organizational Citizenship Behavior instrument (Moorman and Blakely, 1995), and the Intention to Turnover scale (Colarelli, 1984). These data were then used to test a model of the relationships among leadership behaviors, employee perceptions of meaningful work, and selected performance drivers. The results of this study are reported in Chapter IV, while in Chapter V the researcher provides a summary and conclusions; offers implications and recommendations for theory, research, and practice; and, makes recommendations for further research.

CHAPTER II

REVIEW OF LITERATURE

The relevant literature for the three areas pertinent to this study of higher education non-academic middle manager leader behaviors and their relation to employee perceptions of meaningful work and selected performance drivers were reviewed in this chapter. The three areas of literature addressed included leadership theory in general and path-goal leadership, more specifically; the literature surrounding meaningful work; and, research from the higher education context. A conceptual diagram was presented in Figure 2 to depict the three fields of research and how they intersect in the context of the present study. The literature was filtered through the experience of the researcher, who has over 10 years of employment experience in higher education, much of that working as a middle manager.

Figure 2. Conceptual framework for research study.

Following the review of literature for the three conceptual areas that frame the study, 15 research hypotheses were presented. A conceptual model was proposed, where each construct was identified, the paths between constructs were noted, and the directionality of the relationships was specified. Finally, in this chapter, the literature that supports each hypothesis was explored.

Path-Goal Theory of Leadership

The path-goal theory of leadership is one theory, among many, which has emerged during the past century in an attempt to understand leader-follower relationships (Antonakis, Cianciolo, & Sternberg, 2004; Bass, 2008; Blake & Mouton, 1985; Blanchard, Zigarmi, & Zigarmi, 1985; Greenleaf, 1983; House, 1971; Northouse, 2007). Thus, before reviewing the theory in detail, it is important to place path-goal theory in context within the larger leadership literature.

Overview of Leadership Theory

There are a number of perspectives from which to consider leadership. Early leadership researchers viewed leadership primarily as a stable characteristic, or trait, which some individuals possess and others do not (the "great man" theory; Stogdill, 1948). From this perspective, leadership can be understood as a personality or ability characteristic, or combination of characteristics, which influences followers. However, it has limited application to human resource development in that it cannot be nurtured and developed in those lacking these innate qualities.

Other researchers describe leadership as a process or interaction between leaders and followers (Blake & Mouton, 1985; Northouse, 2007). Out of these interactions,

processes, and/or relationships arise observable behaviors from the leader. Those who view leadership from this perspective assert that leadership can be learned and techniques applied in order to solicit desired outcomes in followers.

Leadership can also be discussed from a perspective of positionality and power. Leaders may have formal positions of power over followers, and likewise, legitimate, reward and/or coercive power to instruct, reward, or punish followers. In contrast, other leaders may emerge among a group and hold personal (referent or expert) power based on follower perceptions of idealized values or expertise (French & Raven, 1959).

Another approach to understand leadership is from a contextual point of view. For example, situational leadership is characterized as an adaptive process where leaders adjust their style based on the situational context (Blanchard, Zigarmi, & Zigarmi, 1985). Context is also important for contingency theories of leadership which consider the specific needs of the followers (Fiedler, 1967).

Other perspectives include: 1) understanding leadership as a transformational process which influences and changes followers, 2) seeing leadership as an exchange of resources, or 3) viewing it from a relationship development perspective (Bass, 1985; Burns, 1978; Graen & Uhl-Bien, 1995). As demonstrated in the previous paragraphs, there are numerous perspectives from which to make sense of leadership, many of which could be relevant for research in a higher education context.

Path-goal theory, however, is most relevant to the present study because it focuses on leadership behaviors that can be developed via human resource development interventions, can be used to influence employee perceptions of the workplace, and

ultimately lead to goal accomplishment. Specifically, path-goal leadership behaviors can be learned, adopted by the leader, and adapted when necessary to motivate higher education employees to reach desirable workplace goals by influencing their work perceptions. In the next section, path-goal leadership is examined in depth.

Path-Goal Leadership

Path-goal leadership has some similarity with both the contingency and situational perspectives of leadership. Proponents of path-goal leadership proffer that effective leadership results from matching a leader's style to the appropriate situation, based on the characteristics of the employee (Northouse, 2007). Leadership, according to this theory, can be viewed as a process. Furthermore, path-goal leadership is behavioral in nature and can be enhanced through learning and development.

Path-goal theory, founded on expectancy theories of motivation, was first put forth in the literature by Georgopoulos, Mahoney, and Jones (1957), Evans (1970), and House (1971). Broadly, path-goal theorists propose that, to be effective, the leader must consider both the current work environment and the particular needs of the employee, adjusting his/her style to the various circumstances in order to clarify goals, motivate employees to achieve those goals, and remove barriers that may hinder goal accomplishment (House, 1971). According to path-goal leadership theorists, leaders should focus on employee motivation to enhance employee performance and satisfaction.

House (1971) related the role of the leader as an effort to understand the work environment and employee needs clearly, and where possible, fill in what is missing. He explained,

> The motivational functions of the leader consist of increasing personal pay-offs to subordinates for work-goal attainment, and making the path to these pay-offs easier to travel by clarifying it, reducing road blocks and pitfalls, and increasing the opportunities for personal satisfaction en route. (p. 324)

Path-goal theory is not limited to particular leader behaviors, but explicitly allows for a variety of leader behaviors to be considered which fit within the theory. House (1971), in his original theory, examined only two behaviors: instrumental (initiating structure) and consideration (supportive) behaviors. Most commonly cited in the current literature is House and Mitchell's (1974) revision of the theory where effective path-goal leader behaviors included directive path-goal clarifying, supportive, participative, and achievement-oriented behaviors. As evidence that the theory allows for consideration of additional leader behaviors, House (1996) later reformulated the theory to include eight classes of behavior: supportive leadership, achievement-oriented leadership, interaction facilitation, group oriented decision process, work facilitation, path-goal clarifying behaviors, representation and networking, and value-based leadership.

Despite the many strengths of path-goal theory with respect to understanding the supervisor-employee relationships, one of its major criticisms is its complexity. Because of its contextual nature, many researchers have examined the relationships between and

among various leadership behaviors and selected performance drivers, given multiple moderators (most commonly task structures and employee variables such as need for autonomy). The theory, because it accommodates multiple leadership behaviors that might be appropriate to accomplish goals with varying levels of complexity, for tasks with different types of task structures, in organizations with different levels of formality, and with employees who have varying needs and ability levels, can be nearly impossible to operationalize. In fact, research to date has borne only partial support for the theory (Schriesheim, Castro, Zhou, & DeChurch, 2006; Wofford & Liska, 1993).

This researcher focused on House and Mitchell's (1974) construction of path-goal leadership, testing two of the four leader behaviors: participative and supportive. These behaviors have been selected for inclusion in the study based on their fit in the higher education context to support employee motivation to drive organizational performance.

Participative Leadership Behaviors

Participative leaders involve employees in shaping the purposes and goals of the work unit, engage them in decision making, and collaborate with them to achieve organizational goals (House, 1996). Participative leaders initiate frequent interactions with employees to discuss the work at hand, current challenges, avenues through which solutions might be found, and the current and future direction of the work unit. Participative leaders use language to develop shared meanings with employees, and engage in behaviors that value the opinions, autonomy, and humanity of their employees. In line with the path-goal theory of leadership, participative leader behaviors

should help to clarify goals and paths to goals, and motivate employees who desire higher levels of empowerment and growth (House & Mitchell, 1974). Participative leadership, thus, enhances motivation because it increases the number and variety of payoffs employees can receive through work.

Although middle managers in higher education often have limited power to reward work-oriented goal attainment through extrinsic rewards such as pay and promotion and may have limited ability to determine the types of work being performed, they do, through a participative leadership style, have the ability to influence perceptions of meaningful work by empowering employees, providing opportunities for growth, helping employees find their "place", and shaping employee paradigms regarding the value and importance of the work they perform.

Supportive Leadership Behaviors

Supportive leaders demonstrate concern, warmth, and care for employees by regularly engaging in personal interaction in an attempt to understand and address the individual work and non-work related needs of employees (House, 1996; House & Mitchell, 1974). A supportive leader will adapt his/her behavior and leadership styles to enhance the supervisor-employer relationship and, in so doing, make the path toward goal accomplishment more pleasant. Enhancing this relationship further aids the supervisor in understanding how to best motivate the employee and fill in what may be missing in the work environment (House, 1971). In accordance with the theory, supportive behaviors can be motivating for a number of reasons: by meeting employee

affiliation needs, helping employees feel more capable of accomplishing difficult tasks, and making mundane tasks more tolerable (House, 1996).

Middle Managers in Higher Education

While reported research on middle managers in higher education has been scarce, there is a growing body of literature in recent years (Lovell & Kosten, 2000; Rosser, 2004). Empirical studies known to the researcher were limited primarily to academic middle managers such as deans and department heads (Rosser, Johnsrud, & Heck, 2003), student affairs mid-level administrators (Kane, 1982; Roberts, 2003; Rosser & Javinar, 2003; Sagaria & Johnsrud, 1988; Sermersheim, 2002; Windle, 1998), or middle managers in academic libraries (Rooney, 2010). Only a handful of studies were identified, exploring both executive level and middle managers simultaneously, (Volkwein, Malik, & Napier-Prancl, 1998; Volkwein & Parmley, 2000; Volkwein & Zhou, 2003). Likewise, community college researchers (though not a focus of this study) have examined the needs of middle management (Ebbers, Conover, & Samuels, 2010).

In student affairs, as well as those studies in which researchers looked at multiple levels of university administration, the focus of this growing body of literature has centered around morale, quality of worklife, satisfaction, and career paths of this population (Johnsrud, Heck, & Rosser, 2000; Rosser & Javinar, 2003; Rosser, 2004; Volkwein, Malik, & Napier-Prancl, 1998; Volkwein & Parmley, 2000; Volkwein & Zhou, 2003). In community colleges and academic libraries, this focus has been more on career paths, leadership responsibilities, and training and development (Ebbers, Conover, & Samuels, 2010; Rooney, 2010).

Although research on middle management in general within the context of higher education exists, the growing trend appears to be to address middle management from a special interest perspective – Registrars, Student Affairs, etc. (Ebbers, Conover, & Samuels, 2010; Rooney, 2010; Rosser & Javinar, 2003). Thus, the research instead of becoming more aligned to build a greater understanding of middle management in the higher education landscape, is instead growing increasingly scattered and more difficult to compile. What follows is a review of the most salient research on higher education middle managers, in student affairs, and in general. Because the population of interest did not encompass the community college level, executive levels of administration, or academic libraries, the literature within these fields was purposefully curtailed.

Middle managers comprise the largest group of administrative professionals within higher education institutions (Rosser, 2000; Rosser, 2004). In 2002, out of 600,000 non-academic professional university employees, over 140,000 were in executive/administrative/managerial positions (The Chronicle of Higher Education, 2002; Volkwein & Zhou, 2003). According to Sagaria and Johnsrud (1992), middle management positions in higher education comprised 64% of the overall administrative level positions.

Furthermore, middle managers operate in a number of contexts in higher education. Roles range from academic to non-academic support functions such as admissions, enrollment management, institutional research, office of the registrar, financial aid, student affairs, academic advising, student career services, human resources, computing and technology (IT), external affairs, counseling, student health

services, graduate and undergraduate studies, and planned giving, among others (Rosser, 2004). Middle managers may hold titles such as (assistant/associate) dean, (assistant/associate) director, (assistant/associate) manager, program coordinator, and a variety of other titles (Kraus, 1983).

Because of the diversity of the roles middle managers serve, which vary from institution to institution, defining them can be complex. Middle managers may be distinguished by one or more of the following: position title, job function, position in the hierarchy, and tenure in the profession (Johnsrud & Rosser, 1999; Kraus, 1983; McDade, 1987; Young, 1990). Each of these alone has drawbacks by either leaving out or including individuals who might be classified as middle managers by a separate definition. Penn (1990) provides one of the more inclusive definitions, stating that middle managers comprise those individuals who supervise professional staff and/or manage one or more job/unit functions, but are not part of the executive leadership.

In this study, middle managers comprised those individuals in non-academic support units in non-tenure track positions. These individuals reported to executive levels of administration or other middle managers. They may have supervised student, support or professional staff. They held primary responsibility for executing the procedures and policies within a particular functional unit.

Individuals who work in higher education academic support services (like international student advising) often fall into entry level positions with little foresight or career preparation (Wood & Kia, 2000). Entry level job requirements for these positions rarely specify the need for a specific academic background, but rather consider the

general skills and learning potential of the job candidate (Kuk, Cobb, & Forrest, 2007). Some fields provide a means to attain an advanced degree, such as in student affairs or in academic advising. Over time, and through experience, those entry level professionals who persist may find opportunity to move up through the ranks to serve in middle management positions (Rosser,2000); however, career advancement in support services seems more the result of coincidence, perseverance, and/or fortunate timing than careful planning (Johnsrud & Rosser, 2000).

Middle Manager Context

The experience of middle managers in higher education is unique in many ways from middle managers in corporate settings. Higher education middle managers are usually very specialized in a functional area and tend to rise to their position (e.g., Director of Academic Advising, Associate Director of International Student Services, Director of Student Activities, etc.) from within the institution, and generally from within the functional unit within which they serve (Rosser, 2000). Middle managers often rise through the ranks of their units to attain their middle management position, with little, if any, explicit training in management (Rosser, 2000). Middle managers are unlikely to be able to select their team, and in fact, may find it nearly impossible to dismiss low performing staff. Middle managers may find few rewards for performing above standard levels of expectation, since merit increases are often based on meeting minimal expectations and promotions to higher levels of management are not readily available (Johnsrud, 1996).

On the other hand, those who serve in middle management often find other rewards. Middle management positions in higher education are relatively secure, with little threat of dismissal, and they receive good benefits (Foldesi, Smith, & Toller, 2002). They can also anticipate a relatively stable work environment which may better enable them to balance work and family responsibilities.

Middle managers in higher education exist in a complex environment shaped by multiple factors. Higher education organizations are generally comprised of multiple cultures, operating simultaneously, which have to be navigated skillfully: bureaucratic, negotiating, political, anarchical, developmental, and collegial (Bergquist, 1992; Birnbaum, 1988). Their work is primarily at the process level and coordinating performance at the individual level (Rosser, 2000). Despite this, they have to remain cognizant of organization level strategy and systems in order to adapt to and align with them – and influence them, when possible.

In spite of the complexity of their work environment and the central (yet often invisible) role they play (Scott, 1978), researchers suggest that middle managers are highly dedicated, committed, and enthusiastic about their work (Austin, 1985; Johnson & Rosser, 1990; Moore & Twombly, 1990; Scott, 1978). Yet, human resource personnel have reason to be concerned, as middle managers perceive little recognition for their hard work and expertise (Johnsrud 1996; Scott, 1978). In addition, middle managers indicate concern that they have little to no role in developing the policies they monitor, implement and enforce/defend (Rosser, 2000); limited involvement with the mission and goals of the institution (Moore & Twombly, 1990); and, few opportunities to participate

in university governance (Henkin & Persson, 1992; Moore & Twombly, 1990). Despite high expectations for them to perform (Austin, 1985), they may lack opportunities for advancement and career growth (Austin & Gamson, 1983; Bess & Lodahl, 1969; Fey & Carpenter, 1996; Johnsrud & Rosser, 1999; Moore & Twombly, 1990; Rosser & Javinar, 2003).

Middle Manager Roles

Middle managers in higher education have a number of responsibilities. These include managing and developing staff (hiring, training, modeling, mentoring, coaching, evaluating, disciplining, evaluating, etc.); managing processes (e.g., financial, recruitment, computing); shaping a positive office culture (maintaining staff morale, quality, team orientation, etc.); supporting directives from higher levels of administration; resolving problems among staff or of dissatisfied students, parents, faculty, administrators or other stakeholders; budgeting; reporting; serving and supporting the mission of the university; and, monitoring, implementing, and enforcing policies and procedures, among others (Rosser, 2000).

Middle managers also serve a critical communication function, engaging in both vertical and horizontal levels of communication. They bring issues of importance to the attention of executive level administrators and other institutional units (Mills, 2000). As a boundary spanner, they also bring back information to inform their own unit, and serve in a brokering role by representing the needs of their unit and ensuring others understand the importance of the role the unit serves.

Middle managers often hold positions as formal liaisons with off campus entities that service or support higher education institutions, such as the state/federal government, non-profit organizations, or corporations (Scott, 1976, 1977). Maintaining positive relationships with these external organizations is absolutely critical to the success of the institution (Rosser, 2000). Middle managers are likely to have significant interaction with prospective, current, and former students, thereby impacting matriculation, retention and alumni giving decisions (Rosser, 2000).

Finally, middle managers often have to balance the desires, directions, delegated work of their supervisor with the needs of students, faculty, and other constituents who are the recipient of the services they provide (Rosser, 2000). Because they have to balance institutional needs/constraints with needs/constraints of their employees, a constant tension is created (Rosser, 2000). In the next section, the researcher will explore how employees' perceptions of meaningful work connect to the middle manager's role and context.

Meaningful Work

Models of Meaningful Work

It is through the balancing of institutional, constituent, and employee needs/constraints, and the leadership skills employed by middle managers in higher education, that the importance of meaningful work emerges. Meaningful work can be categorized as one level of work motivation, with work motivation being defined as, "a set of energetic forces that originate both within as well as beyond an individual's being,

to initiate work-related behavior, and to determine its form, direction, intensity, and duration" (Pinder, 2008, p.11).

Meaningful work (or meaning in work) can be differentiated from meaning of work in that the meaning of work refers to the role and value of work in a particular society (Ardichvili & Kuchinke, 2009), whereas meaningful work is an intrinsic motivational factor which goes beyond the values associated with work to something deeper (Chalofsky & Krishna, 2009). According to Chalofsky (2003), "It is the way we express the meaning and purpose of our lives through the activities (work) that comprise most of our waking hours" (p. 73).

Lips-Wiersma and Morris (2009) argued that meaningful work can be expressed as a framework comprised of four constructs, differentiated by their focus (on self or others) and value orientation (being or doing): 1) developing and becoming self, 2) unity with others, 3) expressing full potential, and 4) serving others (see Figure 3). The first construct (developing and becoming self) can be understood as being one's self through moral development, personal growth, and becoming one's full self. The second construct (unity with others) addresses being in community with others by working together, sharing values, and experiencing a sense of belonging. The third construct (expressing full potential) can be characterized as the expression of self in a doing orientation as one creates, achieves, and influences. The final construct (serving others) represents doing for the purpose of others (i.e., making a difference/contribution to the organization and perceiving that one's work has a larger impact in the community/society/world).

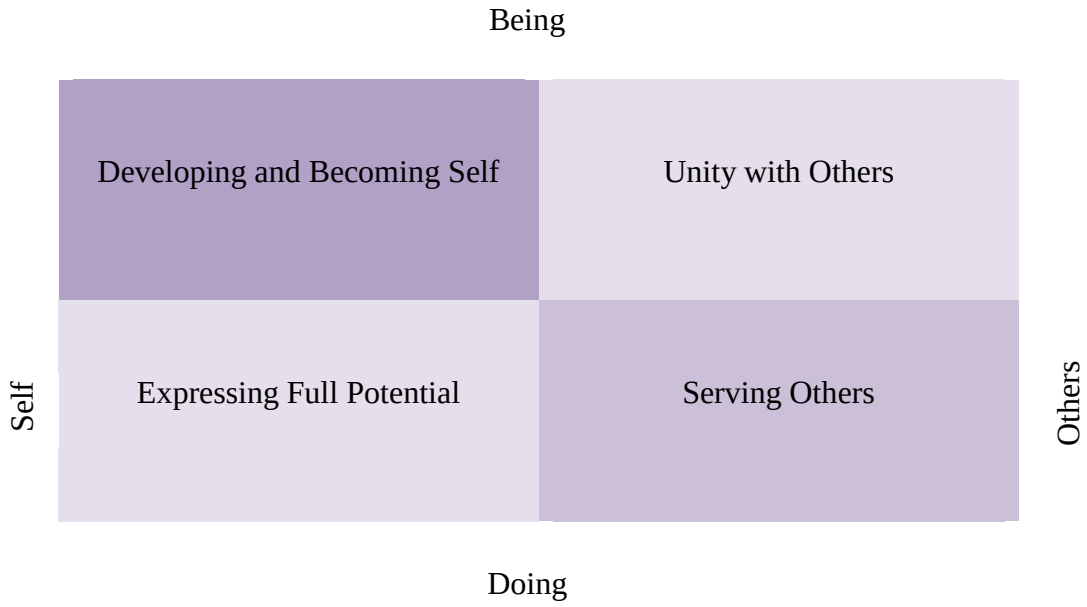

Figure 3. Visual depiction of Lips-Wiersma and Morris's (2009) framework of meaningful work.

Chalofsky (2003) has developed a similar, but unique, meaning of work model with three constructs at each point in a triangle, comprising: 1) a sense of self, 2) the work itself, and, 3) a sense of balance. Like the framework offered by Lips-Wiersma and Morris (2009), two of the constructs in the model proposed by Chalofsky (2003), a sense of self and the work itself, appear to align with three of the constructs in Lips-Wiersma and Morris's (2009) model: developing and becoming self, expressing full potential, and serving others. The sense of self encompasses people bringing their complete self to the workplace and cultivating their potential. The work itself is characterized by creating, achieving, and living out individual purpose in work. Chalofsky, on the other hand, does not directly address the need to be in unity with others or experience a sense of

belonging in the workplace, but rather he proposes that meaningful work requires balancing among "selves" (work, personal, and spiritual) and balancing focus (self and others).

Kahn (1990) included meaningful work (or psychological meaningfulness) as one component of work engagement, along with safety and availability. Psychological meaningfulness is defined as, "a feeling that one is receiving a return on investments of one's self in a currency of physical, cognitive, or emotional energy" (pp. 703-704). According to Kahn, people experience meaningfulness when they sense that they are worthwhile, useful, valuable, and having an impact in the workplace. Kahn further delineated that psychological meaningfulness is influenced by task characteristics (such as creativity, autonomy, challenge, etc.), role fit with self-image, and rewarding personal interactions.

In addition to Kahn (1990), Chalofsky (2003), and Lips-Wiersma & Morris (2009), other researchers have conceptualized meaningfulness (or a similar construct such as higher purpose) in work as one component of a calling orientation (Wrzesniewski, 2003) or as a mediator between transformational leadership and positive affective employee outcomes (Arnold, Turner, Barling, Kelloway, & McKee, 2007; Sparks & Schenk, 2001). To date, there has been no consensus on defining meaningful work and thus no agreement as to how it should be measured.

Meaningful Work Constructs

This study utilized the framework developed by Lips-Wiersma and Morris (2009) through which to consider the impact of higher education middle manager leader

behaviors on selected performance drivers, since it offered a robust conceptualization of the construct in the higher education context. In order to measure employee perceptions of the four constructs which conceptually represent meaningful work, the researcher sought out existing items that had face and content validity with Developing and Becoming Self, Expressing Full Potential, Unity with Others, and Serving Others. Following a search of the research literature, four constructs were identified as having face validity with the meaningful work constructs: growth satisfaction, person-job fit, empowerment, and affiliation commitment.

Growth Satisfaction/Developing and Becoming Self

Growth satisfaction was selected to represent an employee's perception of developing and becoming self in the workplace. Growth satisfaction is conceptualized as an employee's degree of satisfaction with their opportunities for growth and development in the workplace. It also represents the feelings of accomplishment and satisfaction employees feel as they engage in work that challenges and stretches them (Bottger & Chew, 1986). According to Lips-Wiersma and Morris (2009), an employee perceives they are Developing and Becoming Self when they are growing and developing in the workplace. Through work, individuals have new experiences that provide opportunities for moral, physical, and mental growth. These experiences are incorporated into their mental schemas about who they are, what they can do, and what they like/dislike. As a result, work can lead to an increase in knowledge, skills, and abilities as well as a better sense of their identity, which can result in feelings of satisfaction and fulfillment.

Person-Job Fit/Expressing Full Potential

Person-Job fit was selected to represent an employee's sense of Expressing Full Potential. Person-Job fit can be described as the degree of congruency between an employee's knowledge, skills, abilities, values, and needs with the job they are performing (Edwards, 1991). Lips-Wiersma and Morris (2009) described Expressing Full Potential as being able to accomplish something worthwhile in the workplace, to create, and achieve. In order for employees to express their potential, they must possess or acquire the necessary knowledge, skills, and abilities. In other words, to the degree that employees have or experience a congruency with "who they are" and "what it takes" to perform in the job, the better able they will be to express their full potential.

Chalofsky (2003) also raised the idea of meaningful work comprising a Sense of Self. In one sense it represents, similar to Developing and Becoming Self, an employee having opportunities to grow and develop; however, having a Sense of Self also expresses the importance of being able to bring one's whole self to the workplace – again experiencing congruency with individual identity and the job they perform. There is a need for congruency between the work self and personal/spiritual self (Chalofsky, 2003). To the extent employees are able to be "real" in the workplace and express themselves– to be recognized for the unique person that they are, they will experience meaningfulness in the workplace. Person-job fit captures both of these aspects of Expressing Full Potential and Sense of Self, as it considers both employee knowledge, skills, and abilities congruence with work, as well as the congruence of employee values and needs with those of the job.

Affiliation Commitment/Unity with Others

In this study, affiliation commitment represents the meaningful work concept, Unity with Others. Affiliation commitment conveys the sense of emotional connection with others in the workplace, as well as a sense of belonging (Rhoades, Eisenberger, & Armeli, 2001). According to Lips-Wiersma and Morris (2009), employees experience meaningful work when they work alongside each other and foster a sense of community in the workplace. Employees desire to have a role to play within the workplace that is important and valuable.

There is also a need to connect/identify with others through the sharing of values, purpose, and by both giving and receiving (Chalofsky, 2003; Lips-Wiersma & Morris, 2009). Chalofsky (2003) recognized the importance of balance in workplace interactions, where employees need opportunities to share with and support others, but also must serve as the recipients of caring, support, and assistance. This balance maximizes the health and vitality of the workplace, while counteracting employee burnout.

Empowerment/Serving Others

Finally, empowerment was selected to convey an employee's sense of Serving Others. Empowered employees are provided with the resources, guidance, and authority needed in order to take on worthwhile tasks/assignments in the workplace. Managers ensure that, in so doing, employees have (or can acquire) the requisite knowledge, skills, and abilities to be successful in those delegated responsibilities. As a result, employees possess opportunities to have influence in and make contributions to the workplace (Spreitzer, 1995).

Lips-Wiersma and Morris (2009) identified two subthemes underlying the concept of Serving Others: *making a difference* and *meeting the needs of humanity*. When employees have opportunities to contribute their expertise and see the fruition of their contributions, there is a sense of being able to make a difference in the workplace. On the other hand, employees also have a desire to meet more transcendent needs through work (Lips-Wiersma & Morris, 2009). When they are able to understand the larger cause(s) they are serving through their work (i.e., sense that their work is meeting the needs of community/society/world in some way), then meaningfulness is experienced.

Initial Research Hypotheses

As a result of prior research on the constructs of interest, fifteen hypotheses were initially postulated. The proposed constructs and hypothesized paths were visually depicted in Figure 4. While several leader behaviors exist, for the purposes of this study only two behaviors were investigated: participative and supportive. From these two leader behaviors, paths were established to represent a hypothesized relationship to one or more of the constructs that related to an employee's perception of meaningful work: growth satisfaction, person-job fit, empowerment, and affiliation commitment. Finally, paths were proposed between the meaningful work constructs and the three variables which represented selected performance drivers in higher education: learning goal orientation, organizational citizenship behavior, and intention to turnover. Participative and supportive leadership were also hypothesized to relate directly to the construct, intention to turnover. In the sections that follow, each hypothesis was presented along with the supporting literature.

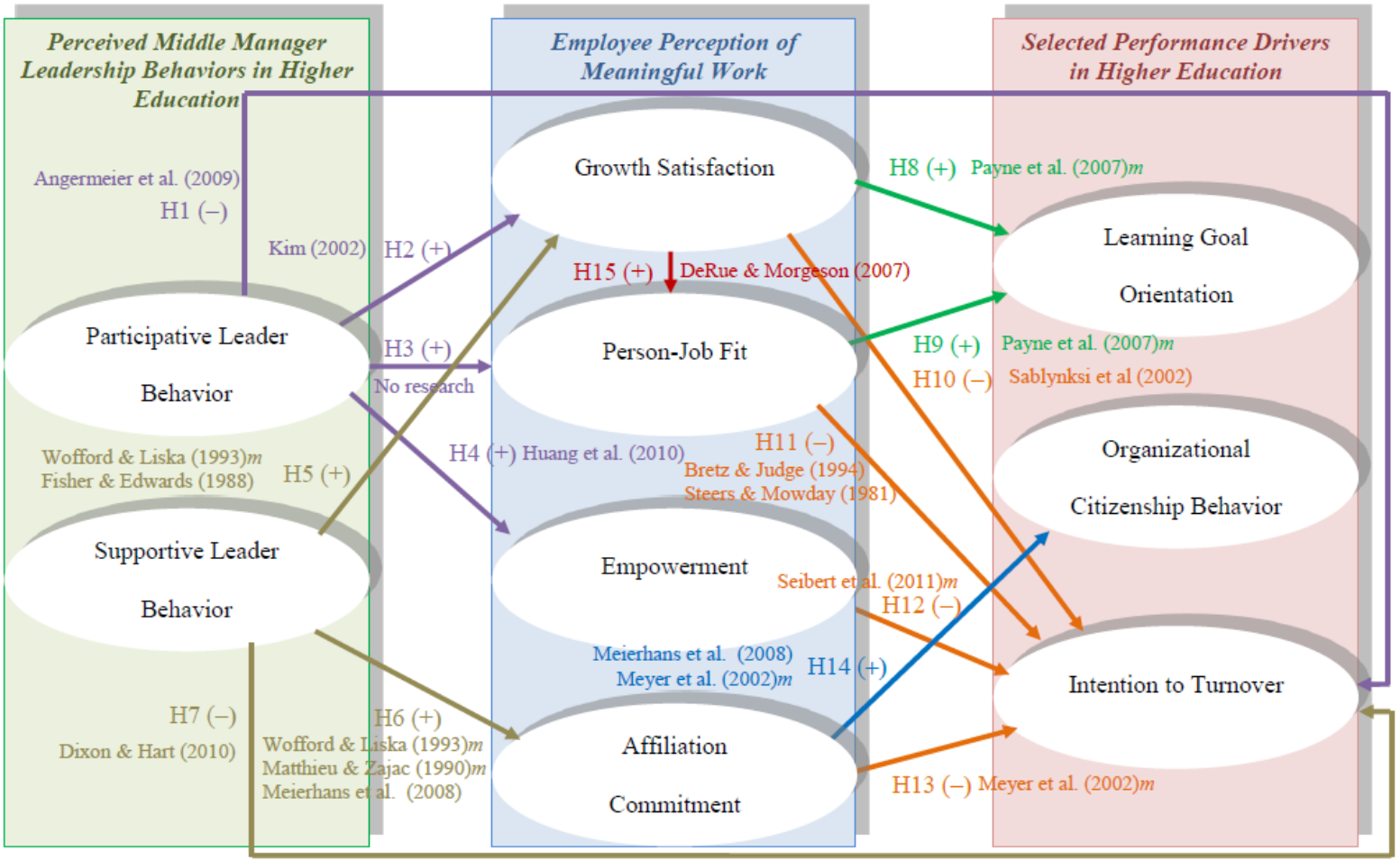

Figure 4. Hypothesized model of perceived non-academic middle manager leader behavior, employee perceptions of meaningful work, and selected performance drivers in higher education. Note: *m* indicates metanalytic study

Hypothesized Relationships Between Leader Behaviors and Other Constructs

Participative Leader Behavior

Four hypotheses were proposed to examine the relationships between and among leader behavior, meaningful work, and selected performance drivers in higher education. Participative leader behavior was added as a construct to House's (1971) original proposition of the theory (which included only initiating structure and consideration behaviors) by House and Mitchell (1974). It represents manager behaviors such as involving employees in discussion to gather their thoughts and opinions, taking into consideration employee's thoughts and recommendations during decision making, and delegating work, among others.

To date, there have been no reported meta-analyses of this construct, primarily because the number of studies on this leader behavior has been limited. Although the focus of existing studies has been largely on organizational outcomes, Angermeier, Dunford, Boss, and Boss (2009) explored employee-level outcomes of participative management in the healthcare industry, including customer service, medical errors, burnout and intention to turnover. In their study, employees in participative work environments reported turnover intentions 61% lower than those of employees who perceived their work environment as authoritarian. Intention to turnover scores were lower for participative management than three other forms of management: exploitive, benevolent, and consultative.

Participative middle managers frequently provide their employees with information and opportunities to influence decisions that affect them. Employees in this

kind of environment are more likely to persist with the organization (Delaney & Huselid, 1996). Thus, the following research hypothesis was offered:

Hypothesis 1: The relationship between participative leadership behaviors and intention to turnover will be negative and significantly different from zero.

Although no reported studies were found in which the relationship between participative leadership and growth satisfaction were examined, Kim (2002), in a study of Nevada public service employees, did identify a positive relationship between participative leadership and overall job satisfaction. The Overall Job Satisfaction Survey utilized by Kim (2002) addressed elements of the growth satisfaction subscale of the Job Diagnostic Survey (Hackman & Oldham, 1974) included in this study. This researcher contends that leaders who involve employees in decision-making and problem solving, through that process, stretch employees knowledge, skills, and abilities. Through their involvement, employees are given opportunities to grow and develop. Based on this, it was hypothesized that:

Hypothesis 2: The relationship between participative leadership behaviors and growth satisfaction will be positive and significantly different from zero.

Although primarily studied in relation to recruitment and selection, person-job (P-J) fit was examined in a continuing employment context in this study. P-J fit can be defined as an employee's perceived congruence (in terms of knowledge, skills, abilities and/or desires) with a particular job (Brkich, Jeffs, & Carless, 2002). In contrast to person-organization (P-O) fit (which speaks to an employee's congruence with a

particular organization), person-job fit has the greater potential to be impacted by the relationship between the employee and supervisor.

In the context of meaningful work, P-J fit refers to an employee's sense that they are capable of expressing themselves through work. In one sense, there is a sense of identity and compatibility with the job, "I am an administrator [academic advisor, etc.]," while in another sense high P-J fit expresses employees being able to use their abilities to achieve, create, and accomplish in the workplace. Employees, in consult with their supervisors, have opportunities to make sense of their work and begin to identify with their position. Supervisors also have power to assign work that matches or extends employee ability, allowing the employee opportunities to achieve and create. It was hypothesized, therefore, that P-J fit would be related to managerial leadership behavior. Despite an absence of reported research to confirm this relationship, the following hypothesis was offered:

Hypothesis 3: The relationship between participative leadership behaviors and perceived person-job fit will be positive and significantly different from zero.

Huang, Iun, Liu, and Gong (2010) examined whether participative leadership enhanced work performance (i.e., task performance and organizational citizenship behaviors) by eliciting employee empowerment or trust in the supervisor. The researchers compared non-managerial subordinates to managerial subordinates and found that empowerment was a significant mediator of work performance for managerial subordinates, while trust in the supervisor was a significant mediator of the supervisor/subordinate relationship for non-managerial employees. For both groups,

there was a significant correlation between participative leadership behavior and psychological empowerment, suggesting that participative leadership generates feelings of empowerment in employees.

The researcher argues, that managers who use participative leader behaviors, are more likely to delegate solution- and decision-making tasks to employees, or involve them in implementing these decisions. By recognizing the voice of employees and giving ownership for work-related tasks and responsibilities, it is likely employees will feel more empowered. Based on this finding, the researcher proposed the following hypothesis:

> *Hypothesis 4: The relationship between participative leadership behaviors and empowerment (meaning and impact items) will be positive and significantly different from zero.*

Supportive Leader Behavior

In this study, the researcher hypothesized a number of relationships between and among supportive leader behavior and the constructs representing meaningful work and performance drivers in higher education. Supportive leaders are friendly, demonstrate care and concern for employees, consider the needs of the employee, listen to employee concerns, and attempt to address expressed and identified employee needs as a means to support their well-being (Dixon & Hart, 2010; House, 1971). In the next paragraphs, the proposed hypotheses and the literature that supports them will be reviewed.

The researcher found support in the literature for a relationship between supportive leadership and growth satisfaction. In a meta-analysis conducted by Fisher

and Edwards (1988) and confirmed in a subsequent meta-analysis (Wofford & Liska, 1993), using a larger sample of studies, a significant, positive relationship between supportive leadership and overall satisfaction was demonstrated. Although, no reported studies were found which specifically tested the relationship between supportive leadership and employee growth satisfaction, growth satisfaction is one component of overall satisfaction. Furthermore, the researcher can logically deduce that managers who care about meeting the needs of employees will do so in ways that foster individual growth and development in the workplace; thus, it was hypothesized in this study:

Hypothesis 5: The relationship between supportive leadership behaviors and growth satisfaction will be positive and significantly different from zero.

Another hypothesis in which the relationship of leader behavior to employee perceptions of meaningful work included supportive leadership and affiliation commitment. Researchers have established that supportive management is an antecedent to higher levels of organization commitment (Mathieu & Zajac, 1990). Wofford and Liska (1993), in their meta-analysis, examined the relationship between supportive leadership behavior and organizational commitment, finding a significant positive relationship. Meierhans, Rietmann, and Jonas (2008), in a study of commitment and organizational citizenship behavior, also found a significant positive relationship between fair and supportive leadership with affective organizational commitment. Based on considerable support from the research literature, the following hypothesis was offered:

Hypothesis 6: The relationship between supportive leadership behaviors and affiliation commitment will be positive and significantly different from zero.

Support also exists in the literature for a direct relationship of supportive leadership with employee intention to turnover. Dixon and Hart (2010), using a sample of manufacturing employees in the southeastern U.S., measured the associations among path-goal leader behaviors, work group effectiveness, and turnover intention. An examination of instrumental, participative, and supportive leadership behaviors determined that only supportive leadership was significantly (and negatively) related to turnover intention (β=-.277, P<.05). This researcher asserts that leaders who support employees will create a more pleasant work environment and enhance satisfaction, resulting in fewer employee intentions to turnover. Thus, the following hypothesis was offered:

Hypothesis 7: The relationship between supportive leadership behaviors and intention to turnover will be negative and significantly different from zero.

Hypothesized Relationships Between Meaningful Work and Selected Performance Drivers in Higher Education

In the following paragraphs, the researcher will propose seven hypotheses to examine the relationships between the meaningful work constructs (growth satisfaction, empowerment, person-job fit, and affiliation commitment) and the selected performance drivers in higher education (learning goal orientation, intention to turnover, and organizational citizenship behavior). The literature which supports these hypotheses will also be reviewed. Additionally, the researcher will link these studies to additional

reasoning, based on the researcher's years of experience in managerial roles in higher education, to support the proposed hypotheses.

Learning Goal Orientation

According to a meta-analysis conducted by Payne, Youngcourt, and Beaubien (2007), learning goal orientation was positively correlated with the need for achievement (ρ=.48) and general self-efficacy (ρ=.71). Although defined differently in this study, the growth satisfaction construct (which considers an employee's satisfaction with their opportunities to grow and develop) and person-job fit (which is used to measure the match between an employee's job role and perceived ability) incorporate aspects of achievement and self-efficacy.

The researcher asserts that employees who are satisfied with their levels of growth and development – and furthermore, who are seeking opportunities to continue to grow and develop, will be more likely to demonstrate a learning goal orientation. A learning goal orientation would reflect their willingness to grow and develop through taking on challenging assignments. Likewise, employees who feel a match between their skills and the job will also feel more capable of stretching themselves in challenging work experiences; thus, the following two hypotheses were offered:

Hypothesis 8: The relationship between growth satisfaction and learning goal orientation will be positive and significantly different from zero.

Hypothesis 9: The relationship between person-job fit and learning goal orientation will be positive and significantly different from zero.

Intention to Turnover

There has been a great deal of research on employee intention to turnover (Angermeier, Dunford, Boss, & Boss, 2009; Dixon & Hart, 2010; Meyer, Stanley, Herscovitch, & Topolnytsky, 2002; Seibert, Wang, & Courtright, 2011) and on its counterpart, employee satisfaction (Bretz & Judge, 1994; Emmert & Taher, 1992; Volkwein, Malik, & Napier-Prancl, 1998; Volkwein & Parmley, 2000; Volkwein & Zhou, 2003). There is also evidence to support that satisfaction and intention to turnover are significantly and inversely correlated (Sablynski, Lee, Mitchell, Burton, & Holtom, 2002; Volkwein, Malik, & Napier-Prancl, 1998). Given that growth satisfaction has been examined under the larger umbrella of overall job satisfaction, and given job satisfaction's negative correlation with intention to turnover (Sablynski et al., 2002), the researcher proposes a relationship between the two constructs. Practitioner experience also supports the reasoning that, employees who are satisfied with their growth and development at work, will be less likely to seek alternative employment. Thus, the following hypothesis was offered:

Hypothesis 10: The relationship between growth satisfaction and intention to turnover will be negative and significantly different from zero.

Person-Job fit (P-J fit) was selected to represent an employee's desire to express their full potential in the workplace. It was defined as, "the degree to which an individual's preferences, knowledge, skills, abilities (KSA), needs, and values match job requirements" (Brkich, Jeffs, & Carless, 2002, p. 43). An individual must possess the capacity to perform the job and recognize a level of congruence with respect to values

and needs in order to express their full potential as they create, influence and achieve goals at work.

To more thoroughly comprehend employee turnover, one must consider the degree to which employee's values and job expectations are realized in a position (i.e., the level of P-J fit; Steers & Mowday, 1981). This researcher contends that, employees who are disappointed with their job and feel a mis-match with respect to their KSA's, values, or needs and the requirements of the position, will begin to seek alternative employment. P-J fit has been associated in the research literature with job satisfaction (Bretz & Judge, 1994). Based on prior literature, the following hypothesis was offered:

Hypothesis 11: The relationship between person-job fit and intention to turnover will be negative and significantly different from zero.

According to a meta-analytic review by Seibert et al. (2011), psychological empowerment was found to be negatively associated with turnover intention. Empowerment, in this study, represented an employee's desire/need to serve others – to make a difference and to meet the needs of the community/society/world. When employees lack a larger sense of meaning and impact in their work, they may be prompted to seek new employment, and likewise, when they perceive they are meeting physical, spiritual, emotional, etc. needs, they will sense their work as more meaningful and persist with the organization. Thus, the researcher proposed the following hypothesis:

Hypothesis 12: The relationship between empowerment and intention to turnover will be negative and significantly different from zero.

Meyer et al. (2002) conducted a meta-analysis of the antecedents, correlates, and consequences of three forms of organizational commitment: affective, continuance, and normative. Affective commitment, also referred to as affiliation commitment, represents an employee's sense of connection and belonging in the workplace. In the meaningful work model, it is associated with an employee's sense of unity and being in community with others in the workplace. This researcher argues that, when employees have an emotional connection with others in the workplace and when they find a "place" for themselves – a role they can play, they will sense higher levels of meaning and tend to persist with the organization. Meyer et al. (2002) confirmed in their meta-analysis that affective commitment is negatively related to employee turnover intention (ρ=-.51) and actual turnover (ρ= -.17), thus, the following hypothesis was proposed:

Hypothesis 13: The relationship between affiliation commitment and organizational citizenship behavior will be positive and significantly different from zero.

Organizational Citizenship Behavior

In Meyer, et al.'s (2002) meta-analysis of the antecedents, correlates, and consequences of affective, continuance, and normative organizational commitment they also identified that affective commitment was positively related to organizational citizenship behaviors (ρ= .32); in fact, affective commitment had a stronger correlation than other forms of commitment (namely, normative and continuation). Additionally, in a study of Swiss bank employees, Meierhans et al. (2008) demonstrated that affiliation commitment served as a mediator between supportive leadership and organizational

citizenship behavior (OCB). The researcher asserts that, in the workplace, those who feel in unity with others and part of a community, will be more likely to go above and beyond outlined job expectations in order to help their co-workers (interpersonal helping behavior) and be productive, responsible, and on-time (personal industry behavior). Thus, the following hypothesis with relation to the employee affiliation commitment and intention to turnover was specified:

Hypothesis 14: The relationship between affiliation commitment and intention to turnover will be negative and significantly different from zero.

Hypothesized Relationships Between Meaningful Work Constructs

Finally, one hypothesis was proposed regarding interrelationships among the constructs which comprise employee perceptions of meaningful work: growth satisfaction, empowerment, affiliation commitment and person-job fit. The researcher suggests that those who are satisfied with their growth and development in the workplace (e.g., who feel they are developing and becoming more of who they envision they can/should be) will also be more likely to perceive that their knowledge, skills, attitudes, values, and needs are well matched with their job (i.e., that they are expressing their full potential). Specifically, DeRue and Morgeson (2007) identified a significant positive correlation between growth satisfaction and person-role fit (similar to person-job fit). Thus, in this study, the researcher proposed the following hypothesis:

Hypothesis 15: The relationship between growth satisfaction and person-job fit will be positive and significantly different from zero.

Summary

New mandates from state and federal governments require universities to be in constant states of change: to ensure compliance with training requirements in the responsible and ethical conduct of research, to hold down tuition costs, to ensure public access to the results/reports of federally funded research, to post all course syllabi online, to report the full-time enrollment of non-immigrant international students each semester or any violations of status, among many others. Universities also face public doubts as to the relevancy, quality, and value of higher education. Ensuring access, decreasing time to degree, increasing retention, and working to create a diverse and healthy climate for all faculty, staff, and students are just a few of the issues with which universities must contend (Cantor, Howard, Miles, Woolsey, & Yudof, 2011). Yet, despite these numerous challenges, funding from state and federal governments has remained stagnant or, in some cases, decreased (NASFAA, n.d.). How do institutions of higher education deal with the increasingly complex environment in which they operate? How can they produce at higher levels with fewer resources?

Researchers in human resource development have asserted that the individuals who work within organizations are essential assets – human capital, and improving individual performance is an important key to meeting organizational challenges (Becker, 1993; Nafukho & Hinton, 2003). This researcher argues that higher education non-academic middle managers, because of their positionality, influence, and role, have great potential to assist universities in meeting the current challenges they face. By employing participative and supportive leader behaviors, as one aspect of their middle

manager role, non-academic middle managers can influence employee perceptions of a meaningful workplace, thereby inducing behaviors that are desirable for the higher education workplace (i.e., retention, learning, and going above and beyond written job expectations). In this chapter the literature relevant to path-goal leadership, meaningful work, and higher education non-academic middle managers and selected performance drivers was reviewed to provide context for the research, justify the importance of the study, and acquire evidence of a gap which prior researchers have not addressed.

The researcher in this study ultimately sought to fill a gap in the literature in higher education. Specifically, the investigator was unable to identify prior research that related non-academic middle manager leader behaviors to employee perceptions of meaningful work and to selected performance drivers in higher education. Understanding the impact of middle manager leader behaviors on employee perceptions of the workplace, as well as how employee perceptions influence work behaviors, provides an important contribution to higher education and for the human resource personnel who work there.

CHAPTER III

METHODS

In this chapter, the methods employed in this study of the relationships among perceptions of middle manager leadership behaviors, perceptions of meaningful work and selected performance drivers of non-academic employees in higher education are explained. The purpose of this study was to determine to what extent perceived non-academic middle manager participative and supportive leadership related to employee perceptions of meaningful work (conceptualized as growth satisfaction, empowerment, person-job fit, and affiliation commitment) and to employee learning goal orientation, organizational citizenship behavior, and intention to turnover. Addressed in this chapter are the study design, population, sampling procedures, instrumentation, data collection process, and data analyses. All research procedures were pre-approved by Texas A&M University's Institutional Review Board (IRB).

Study Design

In order to answer the research question and test the theoretical model regarding the relationships among perceived non-academic middle manager leadership behaviors, employee perceptions of meaningful work, and selected performance drivers, the researcher utilized a cross-sectional survey design and structural equation modeling technique to analyze the data collected. A cross-sectional survey design was utilized to enable the researcher to capture the perceptions of the sample group at a specific point in time. Structural equation modeling (SEM) enabled the researcher to test the linear

relationships among the constructs specified in this study, which were identified based on a thorough review of literature. As illustrated by Figure 5, the overall design and relevant procedures of this research are detailed in a flowchart.

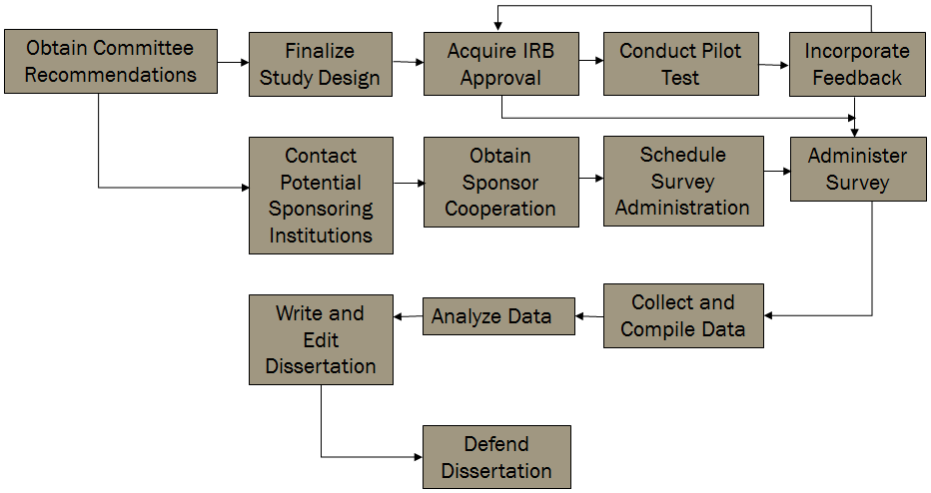

Figure 5. Research design and procedures.

SEM is an advanced, multivariate, statistical modeling technique which allows the researcher to test the validity of a model containing multiple independent and dependent variables, some of which are measured and some unobserved (Swanson & Holton, 2005). Confirmatory factor analysis (CFA), one component of SEM, allowed examination of the relationships of the observed variables to the underlying constructs, while path analysis, another component of SEM, was used to measure the relationships among the unobserved, latent constructs. In short, SEM allows the simultaneous examination of the measurement model (confirmatory factor analysis) and the structural model (path analysis).

The survey utilized in this study, and administered online, consisted of eight existing and validated instruments: the Path-Goal Leadership Questionnaire (PGLQ; lndvik, 1985, 1988), the Job Diagnostic Survey (JDS; Hackman & Oldham, 1974), Empowerment at Work scale (Spreitzer, 1995), the Affiliation Commitment subscale of the Organizational Commitment instrument (Balfour & Wechsler, 1996) , Perceived Ability-Job Fit (P-J fit) scale (Abdel-Halim, 1981), the Learning Goal Orientation subscale in the Work Domain Goal Orientation instrument (VandeWalle, 1997), the Interpersonal Helping and Personal Industry subcales of the Organizational Citizenship Behavior instrument (Moorman & Blakely, 1995), and the Intention to Turnover scale (Colarelli, 1984). A pilot phase, to test the clarity, flow, and user-friendliness of the survey, preceded survey distribution. The pilot test included 6 respondents (comprised of non-academic higher education middle managers, higher education employees, and graduate students). Suggestions made were reviewed by the researcher and used to make minor modifications to survey questions.

Responses were obtained from a population of 4,235 non-faculty employees at a large public institution in the southwestern United States. Estimates of reliability, using Cronbach's alpha technique were calculated for all study constructs, and Principal Components Analysis (PCA) was utilized to test the factor structure for construct validity. Path analysis was used to test the goodness of fit of the hypothesized model. Goodness of fit indices utilized by the researcher included: Chi-Square and degrees of freedom ratio (χ^2/df), Comparative Fit Index (CFI), Tucker-Lewis Index (TLI), Root

Mean Square Approximation (RMSEA), and Standardized Root Mean Square Residual (SRMR). All tests were run at the p = .05 significance level.

In keeping with the SEM technique, this study moved through three stages: model specification, parameter estimation, and fit evaluation. Model specification was developed early in the study with the proposal of a model and hypothetical relationships between constructs. Parameter estimation followed the collection of survey data by obtaining correlations between constructs and testing significance. The final step considered the goodness of fit of the model, as well as possible alternative models with additional or fewer paths.

Strategies for Addressing Common Method Variance

Research involving cross-sectional self-report measures, as in this study, is particularly prone to concerns of common method variance (Spector, 2006). Common method variance (CMV), also referred to as monomethod bias or systematic error variance, refers to the overlap in variance between constructs as a result of using the same method (Avolio, Yammarino, & Bass, 1991). First identified in the literature as a concern by Campbell and Fiske (1959), CMV is said to result in error variance or inflation of the "true" correlations among variables. Podsakoff, MacKenzie, Lee, and Podsakoff (2003) argue that CMV arises from four sources:

1. Common rater sources, such as social desirability/leniency
2. Item characteristics, such as item ambiguity
3. Item context effects, such as item groupings

4. Measurement context effects, such as result from the simultaneous measurement of dependent and independent variables

According to Spector (2006), there are a number of strategies (both design and measurement) to address CMV. One of these includes linking self-report measures to other measures in order to confirm/disconfirm an existing relationship. For example, one could use outside raters (such as peers or supervisors) to control for some self-report biases. Likewise, utilizing objective measures (such as actual turnover, absences, or participation in certain activities) are more resistant to biases.

In this study, CMV was addressed through statistical procedures, specifically, through the use of Harman's single-factor test (Podsakoff et al., 2003). This is a widely used technique by researchers to address concerns with CMV. The test requires all of the variables to be loaded into exploratory factor analysis with the number of extracted factors constrained to one and no rotation. CMV would be considered a problem if a single factor emerged or if the majority of the variance in the factor space could be accounted for by a single factor.

Strategies for Addressing Non-Response Bias

When a survey is distributed to a sample of participants, some level of non-response can be anticipated. Non-response bias, resulting when survey respondents differ on one or more measured variables (or in some systematic way) from those who do not respond, impinges on the validity of study results (Kish, 1965). Non-response bias can be addressed in several ways (Armstrong & Overton, 1977; Lin & Schaeffer, 1995; Voogt et al., 1998), including the following:

1. Careful survey design to encourage a higher number of respondents
2. A well-crafted communication strategy with follow-up to obtain a high response rate.
3. Statistical procedures to account for non-response bias.
4. Comparing survey sample to known population parameters.

In this study the following strategies were utilized to minimize or address non-response bias:

1. Survey design: Item numbers were kept low and an online survey design was utilized to minimize respondent time and effort invested, to encourage a higher response rate.
2. Communication strategy: The researcher worked closely with the host organization to determine the best mechanisms for communicating with the sample group: employing an engaging survey invitation, distributing messages during appropriate timeframes, and sending follow-up emails at 2 and 4 weeks to increase response rate. Response rate was targeted for 30% or more of the sample size.
3. Comparison of sample and population: The researcher accounted for non-response bias by comparing the population and sample demographic characteristics to demonstrate where, if any, difference existed between respondents and non-respondents.

Target Population

The population for this study consisted of 4,235 non-faculty employees at a large, public 4-year institution of higher education in the southwestern United States. Specifically, the study included all budgeted employees who were employed as of April 30, 2012, and met the following criteria in the institutional human resource database:

- Employing job description was not faculty
- Employing job title was not one of the following research titles
    - Temporary Research Assistant
    - Research Assistant
    - Research Associate
    - Senior Research Associate
    - Postdoctoral Research Associate
    - Assistant Research Scientist
    - Associate Research Scientist
    - Research Scientist
    - Assistant Research Specialist
    - Associate Research Specialist
    - Research Specialist
- Employee had reported a non-university email address in the human resource database (660 non-faculty employees were excluded for this reason)

By reviewing the characteristics of the accessible population it was demonstrated that the employees were fairly equally divided between males (N=1,836, 43.35%) and

females (N=2,399, 56.65%) between the ages of 18 and 65, with very few over 66 years of age. Over half of the population was white (69.3%), with Hispanic and Black comprising the next two largest ethnic groups (15.15% and 11.0%, respectively. The population consisted almost exclusively of U.S. citizens – 93%. Employees held primarily High School/GED, Bachelor's, or Master's degrees and worked in a variety of job titles; however, professional/non-faculty employees made up almost half of the population (N=2,009, 47.44%). Finally, the three largest institutional units represented included Academic Affairs, Administration, and Student Affairs. Additional details of the population are provided in Table 1.

Table 1. Employee Population Characteristics

Characteristics		N	Percent
Gender	Male	1836	43.35%
	Female	2399	56.65%
	Not Reported	0	0.00%
	Total	4235	100.00%
Age	18-27	378	8.93%
	28-37	876	20.68%
	38-47	1126	26.59%
	48-57	1217	28.74%
	58-67	591	13.96%
	68 and over	47	1.11%
	Not Reported	0	0.00%
	Total	4235	100.00%
Ethnicity	American Indian Or Alaskan Native	15	0.35%
	Asian	130	3.07%
	Black Or African American	466	11.00%
	Hawaiian Or Other Pacific Islander	3	0.07%
	Hispanic	642	15.16%
	Two or More Races	16	0.38%
	White	2935	69.30%
	Not Reported	28	0.66%
	Total	4235	100.00%

Table 1, Continued

Characteristics		N	Percent
Citizenship	U.S.	3916	92.47%
	International	319	7.53%
	Not Reported	0	0.00%
	Total	4235	100.00%
Highest Education Level	Less Than High School	196	4.63%
	High School or GED	1519	35.87%
	Associate Degree	299	7.06%
	Baccalaureate Degree	1244	29.37%
	Master's Degree	660	15.58%
	Doctoral Degree	243	5.74%
	Special Professional Program	74	1.75%
	Not Reported	0	0.00%
	Total	4235	100.00%
Job Description	Clerical	590	13.93%
	Executive/Administration/Managerial	476	11.24%
	Professional/Non-Faculty	2009	47.44%
	Service/Maintenance	679	16.03%
	Skilled Craft	244	5.76%
	Technical/Paraprofessional	237	5.60%
	Not Reported	0	0.00%
	Total	4235	100.00%
Employing Unit	Academic Affairs	1915	45.22%
	President	243	5.74%
	Administration	1118	26.40%
	Marketing & Communications	22	0.52%
	Research	108	2.55%
	Student Affairs	566	13.36%
	Finance	263	6.21%
	Not Reported	0	0.00%
	Total	4235	100.00%

Study Sample

From the population of employees described above, 1,446 responses (34%) were received. A small number of the responses (105) were unusable, as the individual indicated that their immediate supervisor held a tenure track position at the sponsoring institution. An additional 8 respondents did not indicate the role of their immediate supervisor, and thus, were eliminated.

The final sample size included 1,333 employees who directly reported to non-tenure track faculty within the sponsoring institution. This number far exceeds the minimum sample size (354 for a population of 4,500) suggested by Krejcie and Morgan (1970), as well as the 5:1 cases/parameter ratio recommended by Kline (2011). In Table 2 the demographic characteristics for the sample are shown.

Respondents included male and female employees, though females represented approximately 2/3 of the sample. Age ranges varied; however, the majority of respondents were between 38 and 57 years of age. They were largely white, U.S. citizens with a High School diploma/GED, Bachelor's, or Master's degree. The majority of the sample worked professional/non-faculty positions. Finally, almost half were employed in Academic Affairs with Student Affairs and Administration comprising one third of the sample.

Table 2. Employee Sample Characteristics

Characteristics		N	Percent
Gender	Male	518	38.89%
	Female	814	61.11%
	Not Reported	1	0.08%
	Total	1332	100.00%
Age	18-27	101	7.58%
	28-37	262	19.65%
	38-47	356	26.71%
	48-57	397	29.78%
	58-67	198	14.85%
	68 and over	18	1.35%
	Not Reported	1	0.08%
	Total	1333	100.00%
Ethnicity	American Indian Or Alaskan Native	7	0.53%
	Asian	26	1.95%
	Black Or African American	100	7.50%
	Hawaiian Or Other Pacific Islander	3	0.23%
	Hispanic	141	10.58%
	Two or More Races	8	0.60%
	White	1040	78.02%
	Not Reported	8	0.60%
	Total	1333	100.00%
Citizenship	U.S.	1290	96.77%
	International	43	3.23%
	Not Reported	0	0.00%
	Total	1333	100.00%
Highest Education Level	Less Than High School	5	0.38%
	High School or GED	394	29.56%
	Associate Degree	94	7.05%
	Baccalaureate Degree	449	33.68%
	Master's Degree	301	22.58%
	Doctoral Degree	61	4.58%
	Special Professional Program	28	2.10%
	Not Reported	1	0.08%
	Total	1333	100.00%

Table 2, Continued

Characteristics		N	Percent
Job Description	Clerical	206	15.45%
	Executive/Administration/Managerial	188	14.10%
	Professional/Non-Faculty	746	55.96%
	Service/Maintenance	85	6.38%
	Skilled Craft	52	3.90%
	Technical/Paraprofessional	55	4.13%
	Not Reported	1	0.08%
	Total	1333	100.00%
Employing Unit	Academic Affairs	658	49.36%
	President	60	4.50%
	Administration	251	18.83%
	Marketing & Communications	12	0.90%
	Research	31	2.33%
	Student Affairs	208	15.60%
	Finance	112	8.40%
	Not Reported	1	0.08%
	Total	1333	100.00%

In Chapter III, the researcher compared the demographic characteristic for the study sample and accessible population. Both differences and similarities between the two data sets were explored, specifically with respect to percentages for each of the reported characteristics. Additionally, through the comparison, the researcher addressed the concern of non-response bias.

Instrumentation and Constructs

The electronic survey was comprised of several validated instruments which were used to measure the study constructs, as well as demographic questions. Eight existing instruments were utilized to collect data: 1) Path-Goal Leadership Questionnaire

(Indvik, 1988), 2) the growth satisfaction subscale of the Job Diagnostic Survey (JDS; Hackman and Oldham, 1974), 3) the meaning and impact items of Spreitzer's (1995) Empowerment at Work scale, 4) the affiliation commitment subscale from the Organizational Commitment scale (Balfour & Wechsler, 1996), 5) Abdel-Halim's (1981) Perceived Ability-Job Fit (P-J fit) scale, 6) the five-item subscale for Learning Goal Orientation from VandeWalle's (1997) Work Domain Goal Orientation Instrument, 7) the interpersonal helping and personal industry items from the Organizational Citizenship Behavior (OCB) measure (Moorman & Blakely, 1995), and 8) the Intention to Turnover (IT) scale from Colarelli (1984). Items, not including demographic information, totaled 45.

Instruments were selected utilizing three criteria: 1) reasonable levels of content validity and reliability were met for each, 2) the face validity of the instrument aligned with the conceptual framework for this study, and 3) item number was small. Item number was critical due to the large number of constructs being tested and the increased risk for respondent fatigue. The final instrument was comprised of 45 items plus an additional 4 demographic questions.

Participative and Supportive Leadership

Participative and supportive leadership behaviors were measured using lndvik's (1985, 1988) Path-Goal Leadership Questionnaire (PGLQ). Respondents in a western university (467 non-academic staff in various occupations and representing top management to non-management) were asked to rate the frequency of behavior on a scale of 1 (never) to 7 (always). Sample items included, "My supervisor behaves in a

manner that is thoughtful of subordinates' personal needs" (supportive) and "My supervisor consults with subordinates when facing a problem" (participative). Indvik (1985) addressed the validity of the instrument through factor analysis (principal components with a varimax rotation), noting that separate scales emerged from the data with primary loadings above .40 and no secondary factor loadings above 50% of the primary factor loadings. No additional information regarding the construct validity was provided. Indvik (1985) reported the internal consistency (using Cronbach's Alpha) of the two leadership behaviors on the PGLQ as .84 (supportive) and .80 (participative). The intercorrelation between the two constructs was measured at r=.53 (Indvik, 1985).

Growth Satisfaction

To measure employee perceptions of developing and becoming, the Growth Satisfaction subscale of the Job Diagnostic Survey (JDS) developed by Hackman and Oldham (1974) was utilized. It is a four-item measure with items measured on a scale of 1 to 7 (1= extremely dissatisfied and 7=extremely satisfied). A sample item included, "The amount of personal growth and development I get in doing my job." According to Hackman and Oldham (1974), discriminant validity and reliability of the items were satisfactory, having been refined through three iterations of revisions, using 658 employees employed in 62 different positions in seven different organizations. Discriminant validity was determined by examining the median off-diagonal correlations. For the five facets of job satisfaction, correlations ranged from .23 (social satisfaction with peers/co-worker) to .28 (growth satisfaction; Hackman & Oldham,

1974). The Growth Satisfaction subscale has a reported coefficient alpha measure of .84 (Mathieu, Hofmann, & Farr, 1993).

Empowerment

To measure employee's perceptions of serving others (defined as making a difference and meeting the larger needs of the community/society/world) two sub-scales were utilized from Spreitzer's (1995) Empowerment at Work scale: meaning and impact items. Responses were obtained on a 7-point Likert-type scale where 1= strongly disagree and 7=strongly agree. A sample item from each dimension included, "My job activities are personally meaningful to me (meaning)" and "My impact on what happens in my department is large (impact)". These items have face validity with the meaningful work concept of serving others, where employees are provided with opportunities to use/grow their skills in order to have a positive impact in the workplace. Validity of the instrument has been established, having been used in over 50 studies with populations ranging from nurses to low-wage service, and manufacturing employees (Spreitzer & Quinn, 2001). Confirmatory factor analysis has been used to demonstrate support for separate constructs (Spreitzer, 1995). Confirmatory factor analysis in two samples (industrial and insurance sectors) resulted in acceptable fit (Spreitzer, 1995). For the industrial sample, fit was deemed as excellent (AGFI=.93, RMSR=.04, NCNFI=.97), while the insurance sample had modest fit (AGFI=.87, RMSR=.07, NCNFI=.98). Factor loadings ranged from .61 to .82 for the meaning items and from .54 to .88 for the impact items. Coefficient alphas for the two subscales ranged from 0.81 to 0.87 (meaning) and 0.83 to 0.88 (impact).

Affiliation Commitment

The Organizational Commitment subscale (Affiliation Commitment; Balfour & Wechsler, 1996) was employed to measure employee perception of unity with others. The subscale consists of 3 items with responses measured on a 7-point Likert-type scale (1 = strongly disagree and 7 = strongly agree). A sample item from the subscale includes, "I feel like 'part of the family' at this organization." Kacmar, Carlson, and Brymer (1999), using a sample of 196 hospitality managers and supervisors, utilized confirmatory factor analysis to affirm that affiliation commitment was a separate construct from the other Organizational Commitment (OC) constructs: Identification and Exchange Commitment. Factor loadings for affiliation commitment ranged from .49 to .75. Kacmar et al. (1999) noted that some, but not all, of the fit indices were acceptable (χ^2=107.30 [24]=4.471, p<.001; GFI=.89; AGFI=.79; PGFI=.47; NFI=.84; PNFI=.58; CFI=.90; RMSEA=.13) and that fit for a three-factor model was better than for a one-factor model ($\chi^2 diff(3) = 39.31$, $p < .05$). The instrument has typically been used to measure OC for public sector employees (Fields, 2002). Coefficient alpha for affiliation commitment items was .81.

Person-Job Fit (P-J Fit)

Abdel-Halim's (1981) Perceived Ability-Job Fit (P-J Fit) scale was used to measure employee perception of expressing full potential. P-J Fit refers to how well employees perceive their knowledge, skills, abilities, needs, and values align with current job and job requirements. This construct was measured using a 5-item scale with responses ranging from 1 (strongly disagree) to 5 (strongly agree). A sample item from

the scale, noted "I feel that my work utilizes my full abilities." Xie (1996), using a sample of 1,200 Chinese employees in a number of state-owned organizations and factor analytic techniques, reported that P-J fit did not have mixed loadings with the items measuring Decision Latitude or Job Demands. Abdel-Halim (1981) demonstrated that intercorrelations among three employee ability measures (years of education, years of relevant work experience to the current job, and P-J Fit) were low, ranging from -.13 to -.18. Finally, Hermsen (2008) used the scale with a sample of 170 Midwestern university employees. Principal components analysis with no rotation was performed on the five items to ensure high factor loadings for the items on the construct. Factor loadings ranged from .60 to .88. Xie (1996) measured reliability for the scale at α=0.73, while Hermsen (2008) reported a reliability of α=.80.

Learning Goal Orientation

Employee's learning goal orientation was measured using VandeWalle's (1997) five-item subscale, part of the work domain goal orientation instrument. Responses were measured using a 6-point Likert-type response scale where 1=strongly disagree and 6=strongly agree. A sample item from the scale was, "I am willing to select a challenging work assignment that I can learn a lot from." The instrument was initially tested on four samples (A-D) of university students taking undergraduate management, business administration, psychology, and accounting courses (with 66, 198, 239, and 53 participants, respectively). CFA, reliability analysis, and nomological network analysis were conducted and provided evidence of construct validity (VandeWalle, 1997). Factor analysis confirmed that the instrument included three separate constructs with

eigenvalues greater than one: Learning Goal Orientation, Prove (Performance) Goal Orientation, and Avoid (Performance) Orientation (Porter & Latham, 2013; VandeWalle, 1997). VandeWalle (1997) used principal components analysis with an oblique rotation (i.e., direct oblimin) to extract the three factors. Eigenvalues for the three constructs were reported as 4.64 (Learning Goal Orientation), 3.61 (Prove Goal Orientation), and 1.42 (Avoid Orientation). For Learning Goal Orientation, factor loadings ranged from .65 to .84 with no cross-loadings. The coefficient alpha of the subscale was reported at 0.89 (VandeWalle, 1997).

Organizational Citizenship Behavior (OCB)

Organizational Citizenship Behavior (OCB) was measured using the 19-item instrument developed by Moorman and Blakely (1995). Although the scale was designed to measure four dimensions of OCB: Interpersonal Helping, Individual Initiative, Personal Industry, and Loyal Boosterism, this study used only the Interpersonal Helping and Personal Industry subscales. Interpersonal Helping refers to behaviors which are aimed at helping co-workers, while Personal Industry refers to work-related behaviors which go above and beyond those in the job description. Responses were measured using a 7-point Likert-type response scale where 1=strongly agree and 6=strongly disagree. A sample item from the Interpersonal Helping subscale included, "I go out of my way to help co-workers with work-related problems." A sample item from the Personal Industry subscale included, "I rarely miss work even when I have a legitimate reason for doing so."

The 19-item scale was originally used with a sample of 155 employees in a financial services organization in the southeastern U.S., 80% of whom were female with a mean age of 36.5 years (Moorman & Blakely, 1995). Confirmatory factor analysis was utilized to examine the fit of the hypothesized measurement model, resulting in separate constructs for Interpersonal Helping and Personal Industry. Factor loadings of the items on their respective constructs were significant and ranged from .351-.597 (standardized λ) for the five Interpersonal Helping items and .309 -.440 (standardized λ) for the four Personal Industry items. Fit indices for the model were acceptable (χ^2=229.21; df = 145, CFI=.91, and TLI=.90). Coefficient alphas ranged from 0.67 to 0.78 for the Interpersonal Helping items and 0.61 to 0.83 for Personal Industry items (Fields, 2002).

Intention to Turnover (IT)

Intention to turnover (IT) was measured using a 3-item scale from Colarelli (1984). In Colarelli's (1984) study (consisting of 164 U.S. bank tellers within a single, U.S. metropolitan bank), the items were utilized to measure an employee's future intent to terminate employment in the current organization. Respondents rated each item using a 5-point, Likert-type scale ranging from 1 (strongly disagree) to 5 (strongly agree). A sample item from the scale was, "I frequently think of quitting my job." Banken (2010) used exploratory factor analysis (specifically, principal components analysis) to ascertain that Intention to Turnover items loaded onto a single factor with loadings ranging from .825 to .864. Eigenvalue for the construct was 2.165, and the three item instrument explained 72.15% of the variance of the factor space (Banken, 2010). Banken's study was conducted in The Netherlands with a sample of 454 employees,

representing 34 organizations from various fields. The coefficient alphas for the measure ranged from 0.75 to 0.81 (Banken, 2010; Colarelli, 1984; Shuck, 2010; Shuck, Reio, & Rocco, 2011).

Data Collection Procedures

After finding an organization interested in sponsoring the research study and agreeing on a general plan to execute the study, IRB approval was obtained. The researcher then met in person with the institutional liaison and an IT staff person to determine how to obtain an appropriate data set of potential participants. Data delimiters were identified (see *Target Population* section), as well as which data fields would and would not be provided to the researcher by the institution. Once it was determined that much of the demographic information could be provided directly from the institution, appropriate modifications were made to the survey instrument. The sponsoring organization also made suggestions regarding recruitment materials and timing for the distribution of email invitations.

Pilot Testing

Next a pilot test was conducted with 6 participants (which included non-academic higher education middle managers, employees who reported to middle managers, and graduate student volunteers) to ascertain the clarity of questions and recruitment materials, completion time, ease of online survey use, flow, etc. Potential pilot participants were contacted by email requesting their participation in the pilot. Copies of the recruitment materials, a link to the online survey, and a feedback completion form were included in the email (see Appendix A). Feedback was reviewed

carefully, and minor modifications were made to the survey. All modifications were approved by the IRB prior to distribution of the initial email invitation.

Recruitment

From a list provided by the sponsoring institution of possible participants, a panel was created in the survey software, Qualtrics, and a survey invitation was distributed via email. The survey invitation included information such as purpose and potential benefits of the research, contact information for the researcher in case of questions, ethical guidelines, confidentiality status, and instructions for participation in the online survey. In the invitation, a link unique to the participant directed them to the survey.

The online survey consisted of a cover page with the informed consent and instructions for completing the survey, 45 items from the eight validated instruments, as well as 4 demographic questions. Additional demographic information (e.g., ethnicity, job title, age) for each participant was provided by the institution, and therefore was not included as part of the survey questionnaire. Response to survey questions was not required, but the survey software did provide an alert to the participant for any questions left unanswered.

Follow-up emails were sent at approximately two weeks and four weeks from the initial contact to ensure an adequate response rate and minimize non-response bias. The largest number of responses (763) was obtained following the initial email, 466 were obtained following the second email, and 217 were obtained following the final email distribution.

Data Analysis

Data analyses were conducted using the Statistical Package for the Social Sciences 20.0 (SPSS™) and MPLUS version 6.11. SPSS yielded descriptive statistical data, construct validity, and reliability, while MPLUS facilitated model measurement through confirmatory factor analysis and path analysis. Model fit indices were obtained through employment of the Chi-square goodness of fit (χ^2/ degrees of freedom ratio), Comparative Fit Index (CFI), the Tucker-Lewis Fit Index (TLI), Root Mean Square Error of Approximation (RMSEA), and Standardized Root Mean Square Residual (SRMR). All statistical tests were run at an alpha level of .05 for significance. Details regarding methods employed for data analyses will be explored in the following sections, and the results reported in Chapter IV.

Data Screening

Prior to the data analyses, data were screened for missing responses and tests were conducted for homogeneity, outliers, linearity, and collinearity (Kline, 2011; Tabachnick & Fidell, 1996). SEM requires at least three assumptions be met: 1) normally distributed data, 2) homoscedasticity and linearity, and 3) absence of collinearity (Kline, 2011). Where violations were found additional steps were taken to prevent bias in the results and mitigate software output errors when conducting analyses.

Missing Data

Missing data have the potential to impact data results and generalizability of the results (Tabachnick & Fedell, 1996). Data should, therefore, be screened to determine any patterns of missing data, as well as for overall quantity of missing responses. The

researcher attempted to minimize missing data by ensuring that respondents received an alert for any missing responses before proceeding to the next page of the survey and prior to survey submission.

No patterns were found in the missing data. Throughout a total of 20 cases, only 64 data responses were missing. The majority of respondents failed to respond to 1 or 2 items. The average number of omissions for those cases with missing data was 1.5 items. List-wise deletion, where cases with missing responses were excluded from the analyses, was used to ensure equal case numbers during data analyses. The incomplete response rate was 1.5% (20/1333), which is acceptable (less than 10%) based on Cohen and Cohen (1983).

Normality

The assumption of normally distributed data, according to Kline (2011), refers to both normality of the individual univariate distributions, bivariate normality for the joint distributions of any variable pairs, and linear bivariate scatterplots with homoscedastic distribution of residuals. Although all aspects of multivariate normality can be difficult to assess, Kline (2011) suggests that examination of normality for the univariate distributions can bring to light many instances of multivariate nonnormality.

Univariate normality of the data was tested by examining skewness and kurtosis. Skewness refers to the symmetry of data around the mean (Kline, 2011). Normal data should fall between positive and negative 3 (z-score); data outside of this range should be transformed to correct for positive or negative skewness (Tabachnick & Fidel, 1996).

Kurtosis refers to the height of the distribution curve, where leptokurtic distributions demonstrate a high peak with short tails and platykurtic distributions are flatter with long tails (Tabachnick & Fidel, 1996). Data with a z score greater than 10 should be transformed to address nonnormality (Kline, 2011). In this study no items were found with skewness or kurtosis values greater than +/–3.0, thus the data were judged to be normal and no transformations were made. Normality results are presented in Chapter IV.

Outliers

Outliers refer to scores that differ from others in the data set, generally three standard deviations below/above the mean (Kline, 2011). In this study, potential outliers were identified by utilizing box plots and examining results where data points fall below or above the 25^{th} (Q1) and 75^{th} (Q3) percentile. Identified outliers were minimal, representing a small number of cases compared to the total number of cases. Given that a small number of outliers can be expected in large sample sizes, dropping these cases would result in losing other important data, and using the original metric rather than a transformed one provides more authentic results, the small number of outliers was retained in the data analysis (Kline, 2011; Tabachnick & Fidell, 1996). Box plots are presented in Appendix B.

Collinearity

Collinearity is an indication of extreme correlation (i.e., r=0.90 and above; Kline, 2011). Collinearity points to the presence of redundant variables (Kline, 2011). For this study the presence of collinearity was assessed through the examination of the

correlation matrix to ensure no correlations existed greater than 0.90 (Kline, 2011). The correlational analysis technique used is discussed in a following section, and the correlation matrix is presented in Chapter IV.

Descriptive Statistics

Descriptive statistics were calculated for the respondents. Reports of the frequency, mean, and/or standard deviation for demographic information, as well as study constructs are included in Chapter IV. For this study, demographic information included age, ethnicity, gender, citizenship, educational level, employing unit, years of full-time work experience and years of employment at the institution, within the current unit, and with the current supervisor.

Validity and Reliability Analysis

Data validity and reliability for the survey were assessed. The eight instruments used in this study had been previously validated; however, since they were combined in this study, it was prudent to use exploratory factor analysis (EFA) to cross-validate the instruments in order to consider possible changes to the internal structure of the constructs.

Exploratory Factor Analysis

Exploratory factor analysis (EFA) is a statistical technique, part of a larger set of data reduction methods, whose purpose is to relate a set of observed variables/items to each other (i.e., uncover underlying relationships among observed variables; Meyers, Gamst, & Guarino, 2013). EFA, in contrast to confirmatory factory analysis, is used when the researcher is unclear how items should load together onto constructs

(Tabachnick & Fidell, 1996). EFA is generally used when little research is available in an area to generate hypotheses about unobserved processes by determining which items correlate and load onto single constructs. In this study, however, EFA was deemed appropriate because the items drawn from previously validated instruments were being used in a unique context and had not previously been studied in conjunction with each other. Based on EFA results, modifications were made to the study constructs prior to estimating the structural model.

Principal Components Analysis was utilized for factoring in order to maximize the variance extracted and ensure any unique variance was accounted for in the factor structure (Tabachnick & Fidell, 1996). Varimax rotation, which provided a simple solution and orthogonal separation, was used as the rotation method during extraction of the 45 items (Tabachnick & Fidell, 1996). Principal axis factoring with oblique rotation is another common method used for extraction. Thompson and Vidal-Brown (2001) and Gorsuch (1983) demonstrated that principal component analysis and principal axis factoring yield similar results when the number of variables is large and when variable score reliability is high.

Prior to conducting EFA, the data were analyzed to determine whether they met minimum criteria for factor analysis. First the Kaiser-Meyer-Olkin (KMO) test of sampling adequacy was performed to ascertain the adequacy of the sample correlations for factoring, with a minimum value of .6 required for a good factor analysis (Tabachnick & Fidell, 1996). Second, Bartlett's test of sphericity was employed to reject or retain the null hypothesis that the correlation matrix was proportional to an identity

matrix, where values on the diagonal equal one and all other values equal zero (Tabachnick & Fidell, 1996). The presence of an identity matrix would denote that the variables were not significantly correlated, thus a significant result was necessary in order to proceed with factor analysis.

Finally, communalities were inspected to determine the amount of variance in an item that was captured in (or overlapped with) the extracted constructs. Communality coefficients demonstrate if the items were well defined by the solution, with a low number indicating poor definition (Meyers et al., 2013; Tabachnick & Fidell, 1996). Researchers lack agreement on what represents an acceptable communality value; however, ranges from .10 to .50 or lower have been cited as a factor solution which poorly defines a specific variable (Meyers et al., 2013;Tabachnick & Fidell, 1996; Warner, 2013). In this study, a value of .3 or higher was selected as the communality value required to represent a good solution. Items with communalities less than .3 would be considered for removal (Meyers et al., 2013).

Following extraction, retention of constructs was determined by two criteria: 1) the eigenvalue of the extracted construct must be equal to or greater than one, and 2) the final solution (i.e., total number of constructs retained) had to account for at least 50% of the variance of the factor space (Meyers et al., 2013; Tabachnick & Fidell, 1996). The eigenvalue is a unit that represents the amount of variance accounted for by each construct in the solution and enabled the calculation of the percent variance accounted for in the factor space (i.e., eigenvalue/ number of items in the analysis). Requiring that the final solution meet a threshold of accounting for at least 50% of the variance in the

factor space, ensured that the retained solution captured the majority of the variance and did not result in excessive losses of information (Meyers et al., 2013).

To determine which items to retain within each construct, factor loadings were reviewed and the presence of cross-loadings (loadings of .32 or higher) onto multiple constructs was considered (Tabachnick & Fidell, 1996). Researchers vary on how high a factor loading must be for item retention in the solution, with .32 being toward the bottom of the cutoff range (Meyers et al., 2013; Tabachnick & Fidell, 1996). In this study, factor loadings below .45 were suppressed, as these indicated weak loadings. An item with a factor loading of .45 and above was retained and associated with the construct on which it loaded. In cases of cross-loadings, prior to making a decision to retain or remove the item from the solution, the researcher considered the strength of the loading, looked at the similarity of its loading with that of the other items associated with the same construct, and assessed the reasonability of interpreting the item as belonging to the same construct with the other retained items (Meyers et al., 2013).

Reliability

Reliability of the modified scales was measured with Cronbach's coefficient alpha, a common measure of internal consistency reliability and indicative that responses are consistent across items within a measure (Kline, 2011). With values ranging from 0-1, a value of .70 or larger is considered acceptable for internal consistency (Cicchetti, 1994; Kline, 2011). If values lower than 0.7 were obtained, items would be deleted one at a time to see if the alpha level could be raised to reach this threshold; or, where less than 3 items loaded on a construct, the construct was removed.

Correlation Analysis

Correlation analysis was employed to examine associations between the identified constructs. Since Principal Components Analysis (PCA) was used to extract factors, the factor solution should result in a set of linearly uncorrelated (orthogonal) constructs. Correlation analysis was, therefore, used as a check for the goodness of the solution obtained through PCA.

Pearson's product-moment correlation coefficient, r, was used to measure the strength and direction of the linear association between two constructs (Tabachnick & Fidell, 1996). First, a summated factor score for each construct was obtained using the compute variable function in SPSS, which summated the items within a construct. Next, the bivariate correlation analysis function in SPSS was selected, and the summated constructs were included for analysis, specifying Pearson as the correlation coefficient to be used. The Pearson zero-order correlation coefficients were judged to be low (±.10 to .29), moderate (±.30 to .49), or high (±.50 to 1.0) based on Cohen's (1988) guidelines. Correlations were judged to be significantly different than zero for p-values less than .05 ($p<.05$, 2-tailed).

Structural Equation Modeling

Structural equation modeling is comprised of two stages: testing of the measurement model and estimation of the structural model. Confirmatory Factor Analysis (CFA) allowed the testing of the measurement model, with the examination of item loading on the hypothesized constructs. CFA provided information regarding both convergent and discriminant validity of the constructs (Kline, 2011). Second, path

analysis was used to estimate the structural model. The parameters were estimated using maximum likelihood estimation. Finally, model fit was evaluated using appropriate fit indices, and alternative models with greater/fewer paths were explored as a means to improve model fit. A final model, based on parsimony as well as good fit indices, is offered in Chapter IV.

Summary

In this chapter the methods used to conduct the present study, including selection of the population and sample, data collection, instrumentation and data analysis were addressed. The researcher, in the next chapter, will provide the results from the data analysis procedures that were applied.

CHAPTER IV

RESULTS

This chapter, in which the findings of the relationships among perceived middle manager leadership, employee perceptions of work, and selected performance drivers in higher education are reported, is presented in several parts. First, selected demographic characteristics of the sample and population are described and presented in frequency tables. Second, the presence of common method variance is explored. Third, descriptive statistics for each of the 45 items is presented, including means, standard deviations, skewness and kurtosis values, and the range of scores. Fourth, validity and reliability of the study constructs are reported and compared to previously reported values from the literature. Next, the results of the measurement model for the theorized constructs are presented. Poor fit led the researcher to use exploratory factor analysis as a means to explore the possibility of a different factor structure. The researcher then describes the results of the EFA and reports the reliability of the revised constructs. Finally, in this chapter, the researcher presents the correlation matrix for the revised constructs and reports the results of the SEM measurement and structural models.

Respondent Demographics and Sampling Bias

A comparison of the sample to the study population (see Table 3) reveals that the sample closely resembles the population across all seven demographic factors for which data were gathered: gender, age, ethnicity, citizenship, educational background, job description, and employing unit. An underrepresentation of the population was found in

five sub-categories for four of the seven categories named previously. These include less than high school education (educational background), service/maintenance jobs (job description), Black or African American (ethnicity), Hispanic (ethnicity), and the administration unit (employing unit). At the time this study was being conducted, the service/maintenance workforce (part of the administration employing unit) was facing high stress due to an administrative review that would impact their future employment status. This group is also less likely to have regular access to workstations with computers. These issues likely impacted the low response rate for these categories.

As presented in Table 3, 61.07% of the respondents were female, while 38.86% were male. These numbers closely resemble the population, which were 56.65% and 43.35%, respectively. The majority of respondents were between 28 and 67 years of age (19.65%, age 28-37; 26.71%, age 38-47; 29.78%, age 48-57), which also is representative of the population. Most respondents (78.02%) were White, compared to 69.30% in the population. Hispanics comprised the next highest ethnicity, representing 10.58% of the sample and 15.16% of the population. Blacks followed closely behind, comprising 7.50% of the sample and 11.00% of the population. As mentioned previously the differences in representation between the sample and population are likely related to factors which impacted the service /maintenance unit, which includes high numbers of historically underrepresented minorities.

The researcher found, as shown in Table 3, that almost all respondents were U.S. citizens (96.77%), compared to 92.47% U.S. citizens in the population. Respondents largely held high school diplomas or GEDs (29.56%), baccalaureate degrees (33.68%),

or master's degrees (22.58%). These percentages were similar to the population, though high school/GEDs were more prevalent in the population (35.87%), while baccalaureate (29.37%) and master's degrees were less prevalent (15.58%).

The workforce in the sponsoring institution included a variety of job types from clerical through executive/administrative/managerial positions. Professional/non-faculty comprised the majority of respondents (55.96%), compared to 47.44% of the population. Clerical and executive/administrative/managerial were represented at about 15% each in the sample, compared to 13.93% and 11.24% in the population, respectively. Service/maintenance positions were underrepresented in the sample with only 6.38% responding, while they made up 16.03% of the workforce.

Finally, the sponsoring institution was made up of seven separate employing units, with the majority working in academic affairs (49.36% of respondents and 45.22% of the population). Administration made up the next largest employing unit, including 18.83% of the sample and 26.40% of the population. Student affairs closely followed in size, representing 15.60% of the sample and 13.36% of the population.

Table 3. Employee Sample vs. Population Characteristics

Employee Characteristic		N	Percent of N	Sample (n)	Percent of n
Gender	Male	1836	43.35%	518	38.86%
	Female	2399	56.65%	814	61.07%
	Not Reported			1	0.08%
	Total	4235	100.00%	1333	100.00%
Age	18-27	378	8.93%	101	7.58%
	28-37	876	20.68%	262	19.65%
	38-47	1126	26.59%	356	26.71%
	48-57	1217	28.74%	397	29.78%
	58-67	591	13.96%	198	14.85%
	68 and over	47	1.11%	18	1.35%
	Not Reported	0	0.00%	1	0.08%
	Total	4235	100.00%	1333	100.00%
Ethnicity	American Indian Or Alaskan Native	15	0.35%	7	0.53%
	Asian	130	3.07%	26	1.95%
	Black Or African American	466	11.00%	100	7.50%
	Hawaiian Or Other Pacific Islander	3	0.07%	3	0.23%
	Hispanic	642	15.16%	141	10.58%
	Two or More Races	16	0.38%	8	0.60%
	White	2935	69.30%	1040	78.02%
	Not Reported	28	0.66%	8	0.60%
	Total	4235	100.00%	1333	100.00%
Citizenship	U.S.	3916	92.47%	1290	96.77%
	International	319	7.53%	43	3.23%
	Not Reported	0	0.00%	0	0.00%
	Total	4235	100.00%	1333	100.00%
Highest Education Level	Less Than High School	196	4.63%	5	0.38%
	High School or GED	1519	35.87%	394	29.56%
	Associate Degree	299	7.06%	94	7.05%
	Baccalaureate Degree	1244	29.37%	449	33.68%
	Master's Degree	660	15.58%	301	22.58%
	Doctoral Degree	243	5.74%	61	4.58%
	Special Professional Program	74	1.75%	28	2.10%
	Not Reported	0	0.00%	1	0.08%
	Total	4235	100.00%	1333	100.00%

Table 3, Continued

Employee Characteristic		N	Percent of N	Sample (n)	Percent of n
Job Description	Clerical	590	13.93%	206	15.45%
	Executive/Administration/ Managerial	476	11.24%	188	14.10%
	Professional/Non-Faculty	2009	47.44%	746	55.96%
	Service/Maintenance	679	16.03%	85	6.38%
	Skilled Craft	244	5.76%	52	3.90%
	Technical/Paraprofessional	237	5.60%	55	4.13%
	Not Reported	0	0.00%	1	0.08%
	Total	4235	100.00%	1333	100.00%
Employing Unit	Academic Affairs	1915	45.22%	658	49.36%
	President	243	5.74%	60	4.50%
	Administration	1118	26.40%	251	18.83%
	Marketing & Communications	22	0.52%	12	0.90%
	Research	108	2.55%	31	2.33%
	Student Affairs	566	13.36%	208	15.60%
	Finance	263	6.21%	112	8.40%
	Not Reported	0	0.00%	1	0.08%
	Total	4235	100.00%	1333	100.00%

Common Method Variance

The presence or lack of common method variance (CMV) was tested statistically using a common technique – Harman's single-factor test (Podsakoff et al., 2003). All 45 items were input into exploratory factor analysis with factor extraction constrained to one and no rotation. The single factor accounted for 32.137% of the variance of the factor space. Since the single factor did not account for the majority of the variance, CMV was considered to be absent.

Descriptive Statistics

SPSS 20.0 was used to obtain descriptive statistics (mean, range, and standard deviation) for the 45 items of the survey instrument. These are shown in Table 4, along with skewness and kurtosis values. Descriptive statistics were also calculated for the summated scales, but these will be addressed later in this section.

Four of the items were reverse coded in the original instruments (noted by R in the description column of Table 4). Because of this, appropriate adjustments to re-scale the data were made in SPSS prior to data analysis. For example, Affiliation Commitment Item 3 (AFF 3), "...people I work for do not care about what happens to me" was a reverse coded item where 1 indicated strong disagreement and 7 indicated strong agreement. Wherever respondents selected 1, these values were changed to 7. The value of 2 was changed to 6. The value of 3 was changed to 5, and so forth. This ensured consistency among the items within a scale. Thus, for all Affiliation (AFF1-3) items, a 1 would indicate lack of affiliation and a 7 would represent the presence of affiliation.

Although there are multiple ways to evaluate skewness and kurtosis, with large data sets (like in the present research), slight variations from normality could result in biased interpretations that the data were non-normal (Kline, 2011). This being the case, absolute values for skewness and kurtosis were evaluated for the data gathered in this study. Skewness and kurtosis values were well within the acceptable ranges for normal data. The absolute skew values were all less than 3 (ranging from -1.549 to .803), while the kurtosis values were all less than the conservative value of 10 (ranging from -1.01 to 2.725; Kline, 2011).

While most of the items (GRWTHSAT1-4, EMP1-3M, EMP1-3I, AFF1-3, OCB1-4PI, OCB1-5IH, SL1-5, and PL1-5) were scored on a scale of 1 to 7, some items (PJFIT1-5 and IT1-3) were on a 1 to 5 scale, and five items (LGO1-5, learning goal orientation) were scored on a scale of 1 to 6. These variations existed in the original instruments and, thus, were not altered; however, differing scales does create difficulties when trying to describe results across items. These differences should be kept in mind as the means and standard deviations are presented.

As shown in Table 4, mean scores ranged from 2.22 (for IT3, intention to turnover) to 6.07 (OCB1IH, organizational citizenship behavior). Low scores for the three intention to turnover (IT) items reflected low intention to turnover, which was a positive outcome for this research. Finally, the standard deviations from the mean (SD) ranged from 0.655 (PJFIT2) to 1.884 (AFF3) for the 45 items. The affiliation (AFF1-3) items, along with SL2 (supportive leadership) had the highest standard deviations. PJFIT2 and 5 (person-job fit), along with LGO1-3, and 5 (learning goal orientation), had the lowest standard deviations.

Overall, respondents indicated that they were relatively satisfied with levels of growth satisfaction, empowerment, person-job fit, and affiliation with means above the mid-points of their respective scales. Likewise, respondents perceived, as a whole, that they were learning goal oriented and demonstrated organizational citizenship behaviors. Mean scores for the intention to turnover items were very close to the mid-point of the scale (min 1; max 5), indicating that they neither strongly agreed nor strongly disagreed with the statements. Finally, respondents largely perceived their supervisors as

Table 4. Descriptive Statistics

Item	Description	Mean	SD	Skew	Kurtosis	Min	Max	n
GRWTHSAT1	...amount of personal growth and development I get in doing my job	4.94	1.484	-0.573	-0.197	1	7	1332
GRWTHSAT2	...feeling of worthwhile accomplishment I get from doing my job	5.23	1.429	-0.790	0.106	1	7	1332
GRWTHSAT3	...amount of independent thought and action I can exercise in my job	5.46	1.450	-1.026	0.542	1	7	1332
GRWTHSAT4	...amount of challenge in my job	5.26	1.394	-0.708	-0.039	1	7	1332
EMP1M	...work I do is very important to me.	5.91	1.256	-1.293	1.554	1	7	1333
EMP2M	...job activities are personally meaningful to me.	5.55	1.388	-0.942	0.422	1	7	1333
EMP3M	...work I do is meaningful to me.	5.72	1.336	-1.153	1.019	1	7	1333
EMP1I	...impact on what happens in my department is large.	5.61	1.423	-1.042	0.637	1	7	1332
EMP2I	...have a great deal of control over what happens in my department.	4.55	1.693	-0.427	-0.636	1	7	1332
EMP3I	...have significant influence over what happens in my department.	4.66	1.708	-0.506	-0.613	1	7	1332
AFF1	...feel a strong sense of belonging to this organization.	5.19	1.754	-0.836	-0.256	1	7	1332
AFF2	...feel like “part of the family” at this organization.	5.05	1.820	-0.759	-0.441	1	7	1332
AFF3	...people I work for do not care about what happens to me (R).	5.25	1.884	-0.860	-0.474	1	7	1332
PJFIT1	...feel that my work utilizes my full abilities	3.38	1.210	-0.445	-0.768	1	5	1333
PJFIT2	...feel competent and fully able to handle my job	4.55	0.655	-1.549	2.725	1	5	1333
PJFIT3	...job gives me a chance to do the things I feel I do best	3.81	1.055	-0.786	0.086	1	5	1333
PJFIT4	...feel that my job and I are well matched	3.99	1.020	-0.983	0.528	1	5	1333
PJFIT5	...feel I have adequate preparation for the job I now hold	4.29	0.837	-1.320	1.929	1	5	1332
LGO1	...willing to select a challenging work assignment that I can learn a lot from.	5.33	0.824	-1.345	2.082	1	6	1331
LGO2	...often look for opportunities to develop new skills and knowledge.	5.23	0.848	-0.968	0.596	2	6	1332

Table 4, Continued

Item	Description	Mean	SD	Skew	Kurtosis	Min	Max	n
LGO3	...enjoy challenging and difficult tasks at work where I'll learn new skills.	5.25	0.822	-1.084	1.332	1	6	1331
LGO4	...development of my work ability is important enough to take risks.	4.81	1.037	-0.917	0.886	1	6	1331
LGO5	...prefer to work in situations that require a high level of ability and talent.	5.14	0.841	-0.828	0.357	2	6	1332
IT1	...frequently think of quitting my job.	2.23	1.330	0.764	-0.645	1	5	1332
IT2	...am planning to search for a new job during the next 12 months.	2.35	1.473	0.658	-1.01	1	5	1332
IT3	...will be working for this organization one year from now. [reverse scored]	2.22	1.380	0.803	-0.643	1	5	1330
OCB1IH	...go out of my way to help co-workers with work-related problems.	6.07	0.961	-0.930	0.759	1	7	1332
OCB2IH	...voluntarily help new employees settle into the job	5.77	1.155	-0.736	0.008	1	7	1327
OCB3IH	...frequently adjust my work schedule to accommodate other employee's requests for time off	5.10	1.554	-0.615	-0.154	1	7	1326
OCB4IH	…always go out of the way to make newer employees feel welcome in the work group.	5.79	1.135	-0.788	0.300	1	7	1328
OCB5IH	…show genuine concern and courtesy toward co-workers, even under the most trying business or personal situation.	6.05	0.958	-0.971	0.956	1	7	1333
OCB1PI	…rarely miss work even when I have a legitimate reason for doing so	5.72	1.338	-1.048	0.668	1	7	1332
OCB2PI	…perform my duties with unusually few errors	5.79	1.035	-0.972	1.434	1	7	1332
OCB3PI	…perform my duties with extra-special care	6.01	0.914	-0.746	0.418	1	7	1333
OCB4PI	…always meet or beat deadlines for completing work.	5.94	1.070	-0.993	0.715	1	7	1333
SL1	...maintains a friendly working relationship with subordinates.	5.68	1.449	-1.204	0.935	1	7	1332
SL2	...does little things to make it pleasant to be a member of the group.	4.94	1.786	-0.655	-0.610	1	7	1332
SL3	...says things that hurt subordinates' personal feelings. (R)	5.61	1.644	-1.098	0.116	1	7	1332
SL4	...helps subordinates overcome problems that stop them from carrying out their tasks	4.97	1.610	-0.630	-0.356	1	7	1330

Table 4, Continued

Item	Description	Mean	SD	Skew	Kurtosis	Min	Max	n
SL5	...behaves in a manner that is thoughtful of subordinates' personal needs.	5.35	1.566	-0.865	-0.058	1	7	1332
PL1	...consults with subordinates when facing a problem.	4.95	1.640	-0.683	-0.406	1	7	1331
PL2	...listens receptively to subordinates' ideas and suggestions.	5.31	1.636	-0.893	-0.087	1	7	1330
PL3	...acts without consulting subordinates. (R)	4.48	1.659	-0.270	-0.980	1	7	1330
PL4	...asks for suggestions from subordinates concerning how to carry out assignments.	4.72	1.558	-0.620	-0.379	1	7	1331
PL5	...asks subordinates for suggestions on what assignments should be made.	4.38	1.608	-0.371	-0.715	1	7	1331
Valid n (listwise)								1313

frequently exhibiting participative and supportive leadership behaviors with mean scores falling above the mid-points of the range (toward more frequent use of the behavior). On a scale of 1 to 7 (never to always, respectively), perceptions of supportive leader behavior fell primarily in the 5 point range, while perceptions of supportive leader behavior fell more often in the 4 point range. The bivariate correlations between items are presented in Appendix C.

Validity and Reliability of Theorized Constructs

The study survey was developed based on existing, validated instruments. Researchers have demonstrated that the factor loadings of the items onto their respective constructs were at acceptable levels and that the instrument had reasonable levels of reliability. Using the obtained study data, the researcher first examined reliability and goodness of fit of the constructs as they were theorized in the literature.

Reliability

In this section Cronbach's alpha coefficients for the theorized constructs are presented and compared with the values obtained by other researchers. As shown in Table 5, Cronbach's alpha coefficients for the nine constructs (ranging from α=.804 to α=.896) indicated acceptable reliability. The reliability for the entire instrument was high (α=.925). Three decimal place accuracy, obtained from SPSS, was reported.

Table 5. Reliability Coefficients of Theorized Constructs

Constructs	Abbreviation	Items	Cronbach's Alpha
Participative Leadership	PL1-5	5	0.894
Supportive Leadership	SL1-5	5	0.894
Growth Satisfaction	GrwthSat1-4	4	0.892
Empowerment	EmpM1-3	6	0.896
	EmpI1-3		
Affiliation Commitment	AFF1-3	3	0.844
Person-Job Fit	PJFIT1-5	5	0.804
Learning Goal Orientation	LGO1-5	5	0.885
Organizational Citizenship Behavior	OCBIH1-5	9	0.825
	OCBPI1-4		
Intention to Turnover	IT1-3	3	0.804
Total Instrument		45	0.925

Internal consistency for the items was relatively consistent for the study data compared to that reported by other researchers. Indvik (1985) reported the internal consistency of supportive leadership as α=.84, compared to α=.894 for the obtained study data. Indvik (1985) also reported the internal consistency of participative leadership as α= .80, compared to .894 in this study.

Mathieu et al. (1993) reported a Cronbach's alpha coefficient of .84 for Growth Satisfaction, which matches closely to the reported α=.892 for the obtained study data. Spreitzer's (1995) Empowerment at Work scale had reliability coefficients ranging from .81 to .88, while the obtained study data had a value of α=.896. The Cronbach's alpha coefficient for Affiliation Commitment was measured at α=.81 (Balfour & Wechsler, 1996), compared to α=.844 in the current study. Xie (1996) measured the Cronbach's alpha coefficient of P-J Fit at α=.73, which was slightly lower than the internal consistency measure obtained for this study (α=.804).

Finally, the Cronbach's alpha coefficients for the outcome constructs (Learning Goal Orientation, Organizational Citizenship Behavior, and Intention to Turnover) closely mirrored the values obtained by other researchers. Learning Goal Orientation was reported to have a reliability coefficient of α=.89 (VandeWalle, 1997), compared to an α=.885 in this study. The reliability coefficient for Intention to Turnover, as measured in several studies (Colarelli, 1984; Shuck, 2010; Shuck, Reio, & Rocco, 2011), ranged from α=.75 to α=.81, while the value in this study was measured to be α=.804. The Cronbach's alpha coefficient obtained in this study for Organizational Citizenship Behavior (α=.825) was on the higher part of the range from that reported in prior research (α=.61-.83) (Fields, 2002), yet still consistent.

Measurement Model

After ascertaining reasonable levels of reliability for the theorized constructs, the researcher examined the goodness of fit of the measurement model using MPLUS. Fit of

the model was evaluated by multiple indices, including the Chi-square goodness of fit (χ^2/ degrees of freedom ratio; $p<.05$), Comparative Fit Index (CFI), the Tucker-Lewis Fit Index (TLI), Root Mean Square Error of Approximation (RMSEA), and Standardized Root Mean Square Residual (SRMR). RMSEA values less than .06, CFI and TLI values equal to or greater than .95, and SRMR values equal to or less than .05 are desired for a good fit (Hu & Bentler, 1999). TLI and CFI values greater than .90, and SRMR values equal to or less than .08, are considered to be acceptable (Hu & Bentler, 1999; Kline, 2011). Although Chi-square was reported, fit indices and residuals were the primary indicators of good fit. Chi-square is sensitive to sample size and model complexity (Kline, 2011), thus due to the large sample size of this study, statistical significance was not used as the sole indicator of poor fit.

The results of the measurement model for the theorized constructs are displayed in Figure 6. Theorized constructs are represented by ovals, while items that loaded onto the constructs are represented by rectangles. Standardized path coefficients (interpreted as factor loadings) for each item onto its respective construct are also displayed next to the arrow that connects the item to the construct. Factor loadings ranged from .301 to .950. The smallest loading (.301) corresponded with the item named PJFIT2 onto the construct Person-Job Fit. The largest loading (.950) was found for the item EmpMean3 onto the construct Empowerment. Although all indicators had substantial loadings (>.20; Kline, 2011) on the constructs with which they were associated, goodness of fit indicators were below acceptable levels (χ^2=7721.246 [909]=8.494, p=.000; CFI=.843; TLI=.829; RMSEA=.075; SRMR=.077).

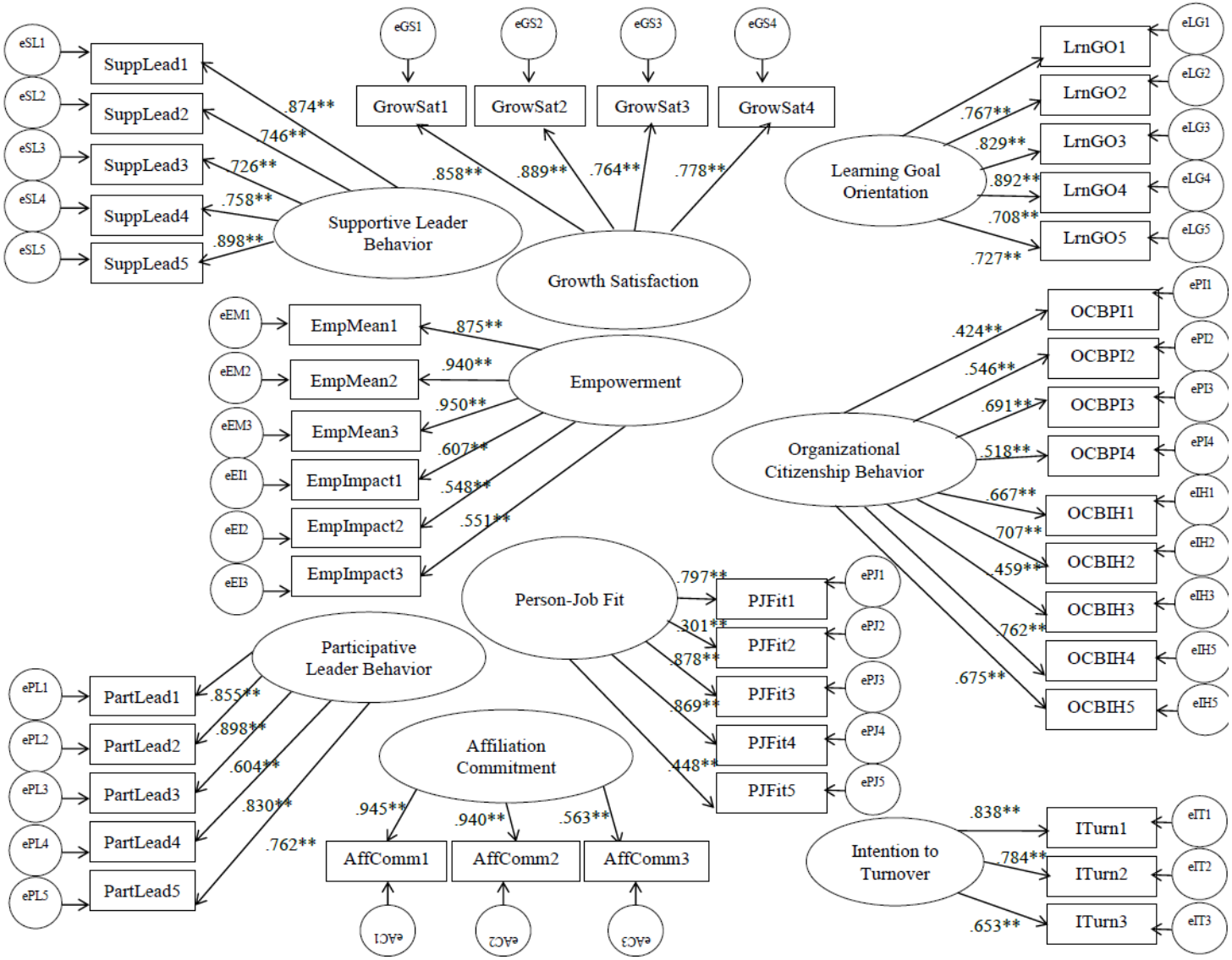

Figure 6. Measurement model results for theorized constructs. χ^2=7721.246 [909]=8.494, p=.000; CFI=.843; TLI=.829; RMSEA=.075; SRMR=.077. Note: * Significant at p<05; ** Significant at p<01

Given the poor fit of the model for the theorized constructs, instead of attempting modifications to improve fit, the researcher pursued the utilization of exploratory factor analysis to examine the underlying factor structure for the items in the unique context of the study. The poor model fit of the theorized constructs suggested that items theorized to load onto one construct are not stable across different groups and, thus, may load differently from the original constructs.

Exploratory Factor Analysis

Exploratory factor analysis was conducted to determine how the items utilized in this study related or loaded onto various constructs. Although validity and reliability had been previously established for each of the scales used in this study, the items had not been used together in any published studies. The Kaiser-Meyer-Olkin (KMO) test of sampling adequacy and Bartlett's test of sphericity were utilized to ensure the sample data met minimum criteria for factor analysis (Tabachnick & Fidell, 1996). KMO for the combined items (KMO=.944) exceeded the .60 value needed for a good factor analysis, while Barlett's test of sphericity was significant at $p<.001$, indicating that the correlation matrix was not proportional to an identity matrix (Tabachnick & Fidell, 1996).

Communalities were inspected to determine how well the solution (i.e., the constructs extracted) accounted for the variance of each item (Meyers et al., 2013; Tabachnick & Fidell, 1996). The communalities for the 45 items are shown in Table 6. Communalities exceeded the minimum criterion value of .30 (Warner, 2013), indicating that the variance in each item was sufficiently captured in the factor solution.

Table 6. Item Information and Communalities

Item Abbreviation	Item Name	Description	Communality
GRWTHSAT1	Growth Satisfaction Item 1	...amount of personal growth and development I get in doing my job	0.651
GRWTHSAT2	Growth Satisfaction Item 2	...feeling of worthwhile accomplishment I get from doing my job	0.708
GRWTHSAT3	Growth Satisfaction Item 3	...amount of independent thought and action I can exercise in my job	0.639
GRWTHSAT4	Growth Satisfaction Item 4	...amount of challenge in my job	0.647
EMP1M	Empowerment - Meaning Item 1	...work I do is very important to me.	0.796
EMP2M	Empowerment - Meaning Item 2	...job activities are personally meaningful to me.	0.839
EMP3M	Empowerment - Meaning Item 3	...work I do is meaningful to me.	0.850
EMP1I	Empowerment - Impact Item 1	...impact on what happens in my department is large.	0.624
EMP2I	Empowerment - Impact Item 2	...have a great deal of control over what happens in my department.	0.836
EMP3I	Empowerment - Impact Item 3	...have significant influence over what happens in my department.	0.849
AFF1	Affiliation Commitment Item 1	...feel a strong sense of belonging to this organization.	0.777
AFF2	Affiliation Commitment Item 2	...feel like “part of the family” at this organization.	0.725
AFF3	Affiliation Commitment Item 3	...people I work for do not care about what happens to me (R).	0.439
PJFIT1	Person-Job Fit Item 1	...feel that my work utilizes my full abilities	0.655
PJFIT2	Person-Job Fit Item 2	...feel competent and fully able to handle my job	0.682
PJFIT3	Person-Job Fit Item 3	...job gives me a chance to do the things I feel I do best	0.683
PJFIT4	Person-Job Fit Item 4	...feel that my job and I are well matched	0.694
PJFIT5	Person-Job Fit Item 5	...feel I have adequate preparation for the job I now hold	0.666

Table 6, Continued

Item Abbreviation	Item Name	Description	Communality
LGO1	Learning Goal Orientation Item 1	...willing to select a challenging work assignment that I can learn a lot from.	0.676
LGO2	Learning Goal Orientation Item 2	...often look for opportunities to develop new skills and knowledge.	0.750
LGO3	Learning Goal Orientation Item 3	...enjoy challenging and difficult tasks at work where I'll learn new skills.	0.802
LGO4	Learning Goal Orientation Item 4	...development of my work ability is important enough to take risks.	0.643
LGO5	Learning Goal Orientation Item 5	...prefer to work in situations that require a high level of ability and talent.	0.666
IT1	Intention to Turnover Item 1	...frequently think of quitting my job.	0.714
IT2	Intention to Turnover Item 2	...am planning to search for a new job during the next 12 months.	0.740
IT3	Intention to Turnover Item 2	...will be working for this organization one year from now. [reverse scored]	0.642
OCB1IH	Organizational Citizenship Behavior - Interpersonal Helping Item 1	...go out of my way to help co-workers with work-related problems.	0.602
OCB2IH	Organizational Citizenship Behavior - Interpersonal Helping Item 2	...voluntarily help new employees settle into the job	0.720
OCB3IH	Organizational Citizenship Behavior - Interpersonal Helping Item 3	...frequently adjust my work schedule to accommodate other employee's requests for time off	0.410
OCB4IH	Organizational Citizenship Behavior - Interpersonal Helping Item 4	…always go out of the way to make newer employees feel welcome in the work group.	0.746
OCB5IH	Organizational Citizenship Behavior - Interpersonal Helping Item 5	…show genuine concern and courtesy toward co-workers, even under the most trying business or personal situation.	0.563
OCB1PI	Organizational Citizenship Behavior - Personal Industry Item 1	…rarely miss work even when I have a legitimate reason for doing so	0.523
OCB2PI	Organizational Citizenship Behavior - Personal Industry Item 2	…perform my duties with unusually few errors	0.705
OCB3PI	Organizational Citizenship Behavior - Personal Industry Item 3	…perform my duties with extra-special care	0.690
OCB4PI	Organizational Citizenship Behavior - Personal Industry Item 4	…always meet or beat deadlines for completing work.	0.546

Table 6, Continued

Item Abbreviation	Item Name	Description	Communality
SL1	Supportive Leadership Item 1	...maintains a friendly working relationship with subordinates.	0.751
SL2	Supportive Leadership Item 2	...does little things to make it pleasant to be a member of the group.	0.580
SL3	Supportive Leadership Item 3	...says things that hurt subordinates' personal feelings. (R)	0.562
SL4	Supportive Leadership Item 4	...helps subordinates overcome problems that stop them from	0.602
SL5	Supportive Leadership Item 5	...behaves in a manner that is thoughtful of subordinates' personal needs.	0.778
PL1	Participative Leadership Item 1	...consults with subordinates when facing a problem.	0.722
PL2	Participative Leadership Item 2	...listens receptively to subordinates' ideas and suggestions.	0.803
PL3	Participative Leadership Item 2	...acts without consulting subordinates. (R)	0.426
PL4	Participative Leadership Item 4	...asks for suggestions from subordinates concerning how to carry out assignments.	0.698
PL5	Participative Leadership Item 5	...asks subordinates for suggestions on what assignments should be made.	0.620

Exploratory factor analysis, via principal components analysis with varimax rotation (as described in Chapter III), produced eight constructs, each with an eigenvalue equal to or greater than 1, for the combined 45-item survey. The eight constructs (except for Intention to Turnover and Learning Goal Orientation) did not match the constructs as reported from the original instruments. Based on preliminary extraction, the constructs will be referred to as Components 1-8. The new constructs will be examined further and named in a later section.

The total variance explained for the items in this study are presented in Table 7, where eigenvalue exceeded one. The eigenvalue for the first construct, Component 1,

was 14.461 and explained 32.14% of the variance of the factor space. Component 2 explained 11.92% of the variance with an eigenvalue of 5.363. Component 3 accounted for 7.77% of the total variance (eigenvalue 3.496). The first three components cumulatively account for the major proportion of the total variance (51.83%).

The last five components accounted for the remaining 15.81% of the total variance. Component 4 explained 4.5% of the variance of the factor space and had an eigenvalue of 2.022. Component 5 had an eigenvalue of 1.53, explaining 3.403% of the variance. Component 6 had an eigenvalue of 1.31 and explained 2.911% of the variance. Component 7 had an eigenvalue of 1.185 and accounted for 2.634% of the total variance. The final construct, Component 8, had an eigenvalue of 1.068, and accounted for 2.373% of the total variance. Together the eight constructs explained 67.64% percent of the total variance of the factor space.

Table 7. Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	14.461	32.137	32.137	14.461	32.137	32.137
2	5.363	11.919	44.055	5.363	11.919	44.055
3	3.496	7.769	51.824	3.496	7.769	51.824
4	2.022	4.494	56.318	2.022	4.494	56.318
5	1.531	3.403	59.721	1.531	3.403	59.721
6	1.310	2.911	62.632	1.310	2.911	62.632
7	1.185	2.634	65.266	1.185	2.634	65.266
8	1.068	2.373	67.639	1.068	2.373	67.639
.....						

Note: Components with Eigenvalues below 1.0 not displayed

Factor loadings for the survey items clearly loaded onto distinct constructs (i.e., no double loadings – loadings of .32 or higher; Tabachnick & Fidell, 1996), except in two cases. The rotated component matrix for loadings across the eight constructs is presented is Table 8; however, cross-loading is reported for only one of the two items since factor loading values below.45 were suppressed. Naming of the eight constructs is addressed more fully in a later section.

Loadings for the first construct ranged from .715 to .866. This construct was named Cooperative Leader Behavior. It was comprised of ten items that included Supportive Leadership items 1 through 5 (SL1-5) and Participative Leadership items 1 through 5 (PL1-5). Although the item names no longer correspond to their original, reported constructs, they were retained for reference purposes.

The second construct was named Work Fulfillment and Identity. This construct was comprised of 10 items: Growth Satisfaction items 1, 2, and 4 (GRWTHSAT1, 2, 4); Empowerment-Meaning items 1-3 (EMP1-3M); and, Person-Job Fit items 1, 3, and 4 (PJFIT1-5). Factor loadings varied from .598 to .867.

Factor loadings for the third construct ranged from .751 to .856. This construct represented the original construct, reported in the literature as Learning Goal Orientation. Learning Goal Orientation was comprised of five items, representing Learning Goal Orientation items 1-5 (LGO1-5).

The fourth construct was named Interpersonal Helping. It included 5 items – Organizational Citizenship Behavior-Interpersonal Helping items 1-5 (OCB1-5IH). Factor loadings ranged from .530 and .830.

Table 8. Varimax Rotated Component Matrix

Item Abbreviation	Item Name	Construct							
		1	2	3	4	5	6	7	8
GRWTHSAT1	Growth Satisfaction Item 1		0.598						
GRWTHSAT2	Growth Satisfaction Item 2		0.626						
GRWTHSAT3	Growth Satisfaction Item 3					0.512			
GRWTHSAT4	Growth Satisfaction Item 4		0.670						
EMP1M	Empowerment - Meaning Item 1		0.837						
EMP2M	Empowerment - Meaning Item 2		0.867						
EMP3M	Empowerment - Meaning Item 3		0.873						
EMP1I	Empowerment – Impact Item 1		~~0.477~~			0.556			
EMP2I	Empowerment – Impact Item 2					0.763			
EMP3I	Empowerment – Impact Item 3					0.781			
AFF1	Affiliation Commitment Item 1					0.541			
AFF2	Affiliation Commitment Item 2					0.474			
AFF3	Affiliation Commitment Item 3								
PJFIT1	Person-Job Fit Item 1		0.682						
PJFIT2	Person-Job Fit Item 2								0.729
PJFIT3	Person-Job Fit Item 3		0.662						
PJFIT4	Person-Job Fit Item 4		0.706						
PJFIT5	Person-Job Fit Item 5								0.713
LGO1	Learning Goal Orientation Item 1			0.768					
LGO2	Learning Goal Orientation Item 2			0.830					
LGO3	Learning Goal Orientation Item 3			0.856					
LGO4	Learning Goal Orientation Item 4			0.768					
LGO5	Learning Goal Orientation Item 5			0.751					
IT1	Intention to Turnover Item 1							-0.638	
IT2	Intention to Turnover Item 2							-0.751	
IT3	Intention to Turnover Item 2							-0.709	

Table 8, Continued

Item Abbreviation	Item Name	Construct							
		1	2	3	4	5	6	7	8
OCB1IH	Organizational Citizenship Behavior - Interpersonal Helping Item 1				0.709				
OCB2IH	Organizational Citizenship Behavior - Interpersonal Helping Item 2				0.824				
OCB3IH	Organizational Citizenship Behavior - Interpersonal Helping Item 3				0.530				
OCB4IH	Organizational Citizenship Behavior - Interpersonal Helping Item 4				0.830				
OCB5IH	Organizational Citizenship Behavior - Interpersonal Helping Item 5				0.682				
OCB1PI	Organizational Citizenship Behavior - Personal Industry Item 1						0.658		
OCB2PI	Organizational Citizenship Behavior - Personal Industry Item 2						0.754		
OCB3PI	Organizational Citizenship Behavior - Personal Industry Item 3						0.658		
OCB4PI	Organizational Citizenship Behavior - Personal Industry Item 4						0.584		
SL1	Supportive Leadership Item 1	0.823							
SL2	Supportive Leadership Item 2	0.729							
SL3	Supportive Leadership Item 3	0.715							
SL4	Supportive Leadership Item 4	0.755							
SL5	Supportive Leadership Item 5	0.850							
PL1	Participative Leadership Item 1	0.819							
PL2	Participative Leadership Item 2	0.866							
PL3	Participative Leadership Item 2	0.639							
PL4	Participative Leadership Item 4	0.800							
PL5	Participative Leadership Item 5	0.749							

The fifth construct was named Work Influence and Affiliation. Work Influence and Affiliation included six items: Growth Satisfaction item 3 (GRWTHSAT3); Empowerment-Impact items 1-3 (EMP1-3I), and Affiliation Commitment items 1 and 2 (AFF 1, 2) and had factor loadings between .474 and .781. Although one of the six items (EMP1I...*impact on what happens in my department is large*) loaded on more than one construct, it was retained with Work Influence and Affiliation after giving consideration to, 1) the strength of the loading, 2) it's face validity with other items associated with Work Influence and Affiliation, and 3) it's loading in context with the other items that loaded onto each construct.

Emp1I loaded on both Work Fulfillment and Identity (.477) and Work Influence and Affiliation (.556), with the higher loading on Work Influence and Affiliation. The loading of Emp1I on Work Fulfillment and Identity was much lower than the loading of other items on this construct (.477 for Emp1I compared to .598-.873 for all other items). Furthermore, it loaded (.556) similarly to other items on Work Influence and Affiliation with the third highest loading that included a range of .474-.781 for all items.

The sixth construct was named Personal Industry. Personal Industry had factor loadings that ranged from .584 to .754. This construct included four items, Organizational Citizenship Behavior-Personal Industry, items 1-4 (OCB1-4PI).

The seventh construct, Intention to Turnover, included the three intention to turnover items (IT1-3) with factor loadings ranging from -.638 to -.751. The final, eighth construct included only two items associated with the original construct that was named Person-Job Fit (PJFIT 3, 4), with factor loadings of .729 and .713, respectively. Finally,

a single item (Affiliation Commitment Item 3; AFF3), associated with the original construct Affiliation Commitment, did not load onto any of the eight constructs.

Removal of Items from Data Analysis

Based on the results of the exploratory factor analysis and subsequent reliability checks for the constructs, three items were eliminated from the remaining data analyses. One item relating to affiliation commitment, that did not load on any construct, was eliminated from further study. This item (AFF3) stated, "...people I work for do not care about what happens to me" and was a reverse scored item. Component 8 consisted of only 2 manifest variables, and they were related to the original construct reported as Person-Job Fit (Person-Job Fit, items 2 and 5). Since this construct had low reliability (Cronbach's α=.677) and accounted for the smallest percentage of the variance of the factor space, it was removed from the study.

Out of the 45 original items, 42 items were retained in the study. These items were represented in seven constructs. Two of the constructs reflected the original scales from which they were drawn (Learning Goal Orientation and Intention to Turnover), three were a combination of various existing scales (Cooperative Leader Behavior, Work Influence and Affiliation, and Work Fulfillment and Identity), and two represented a portion of one scale (Personal Industry and Interpersonal Helping). In the next section, the researcher explores the naming of the new constructs that were identified.

Naming of Constructs

Cooperative Leader Behavior

Based on the item loadings on the first construct, the original participative and supportive leadership scales (lndvik, 1985, 1988) were combined into a single construct, named *Cooperative Leader Behavior*. The word *cooperative* reflects the interactive/participative nature of the leader/follower relationship, as well as the understanding and support offered by the supervisor. This new construct consisted of 10 items (SL1-5 and PL1-5). Sample items included, "My supervisor behaves in a manner that is thoughtful of subordinates' personal needs" and "My supervisor consults with subordinates when facing a problem." Although lndvik (1985) used factor analysis to demonstrate separateness of the scales with primary factor loading above 50% for each, results for the data obtained in this study were not consistent with those obtained by Indvik (1985).

The present results led the researcher to suggest that employees in today's non-academic higher education context perceive participative (involving employees in decision-making, empowering employees, motivating, recognizing achievement and effort, and input seeking) and supportive (friendly, considerate, caring, open communication, respect, and comfortable working atmosphere) leadership similarly. A visual depiction of the new exogenous construct (Cooperative Leader Behavior) compared to the original constructs for the hypothesized model of non-academic middle manager leadership, employee perceptions of meaningful work, and selected performance drivers in higher education is depicted in Figure 7.

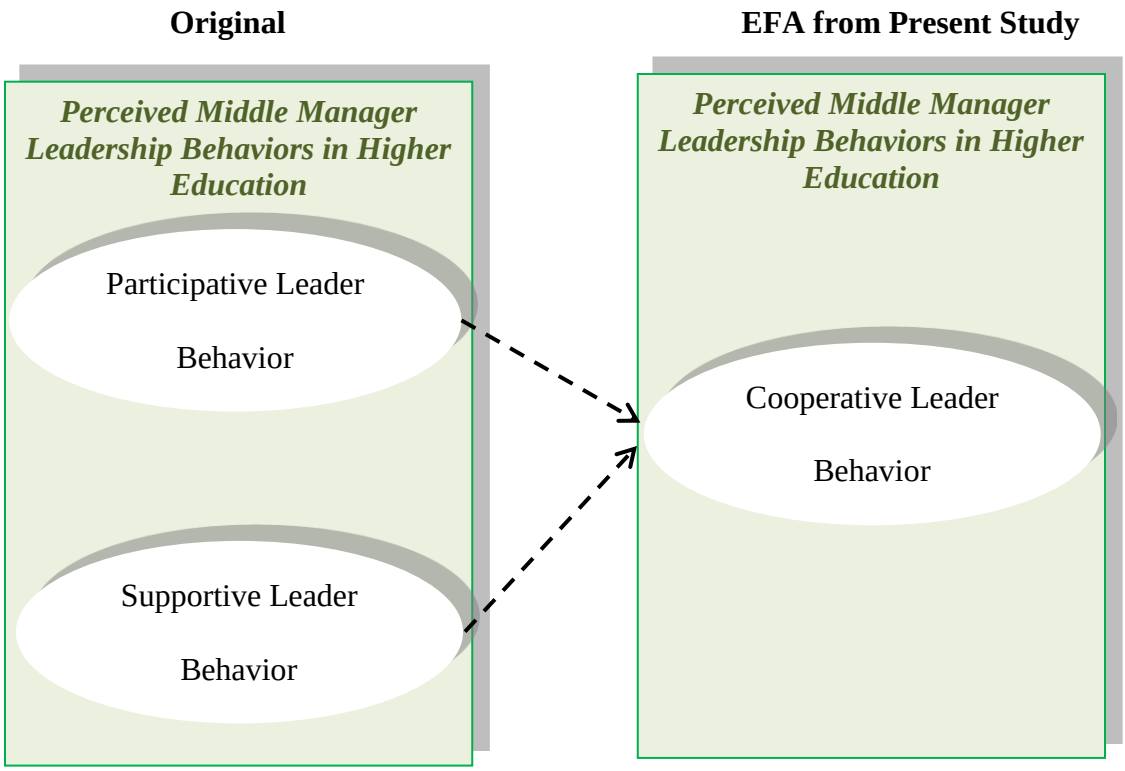

Figure 7. Participative and Supportive Leadership in the original hypothesized model of middle manager leadership and Cooperative Leadership construct from exploratory factor analysis in the present study.

Work Fulfillment and Identity

From the original four constructs that this researcher represented as an employee's perception of meaningful work (Growth Satisfaction, Empowerment, Person-Job Fit, and Affiliation Commitment), two revised constructs were obtained in this study: Work Fulfillment and Identity and Work Influence and Affiliation. Growth Satisfaction (specifically, items GRWTHSAT 1, 2, 4 in this study) from Hackman and Oldham's Job Diagnostic Survey (1974), combined with Spreitzer's (1995) meaning

items from the Empowerment at Work scale (specifically, EMP1-3M in this study), and three items from the Perceived Ability-Job Fit (PJFIT1, 3, 4) scale (Abdel-Halim, 1981) to form a new construct, named *Work Fulfillment and Identity*.

This new construct was named by overlaying Lips-Wiersma and Morris' (2009) meaningful work model on the items based on face validity. The nine items fell into three quadrants of the Lips-Wiersma and Morris (2009) model: Developing and Becoming Self, Expressing Full Potential, and Serving Others (see Figure 8). Next the description of each item was reviewed to determine what similarities existed. Sample items included, "I am satisfied with the feeling of worthwhile accomplishment I get from doing my job"; "My job activities are personally meaningful to me"; and, "This job gives me a chance to do the things I feel I do best." Finally, the strength of the factor loading for each item was considered as a means to give emphasis to those items in the naming process, with Emp1-3M having the highest loadings.

Overall, the items were perceived to relate to an employee's sense of self in the workplace (both in terms of being and doing) – how an employee identified with and was fulfilled by the work as they grew and developed in the workplace, as well as how well they felt the job allowed them to express who they were and envisioned themselves becoming. The items also related (along the doing orientation) with how an employee felt that their work allowed them to express their potential and how they made meaning of their work as a source of work fulfillment. The name Work Fulfillment and Identity was selected to express this conceptualization.

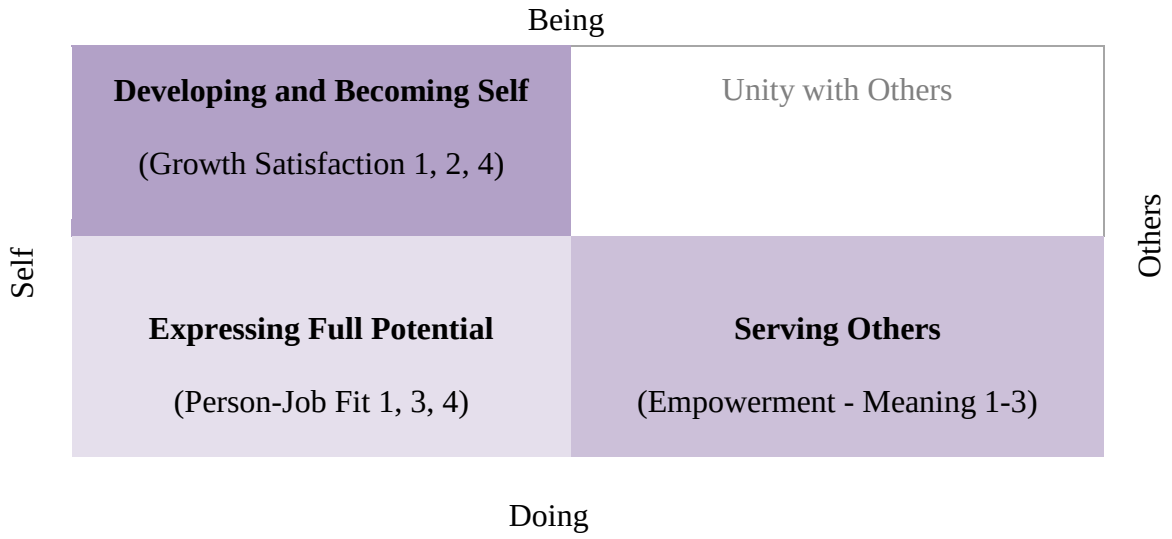

Figure 8. The Work Fulfillment and Identity manifest variables overlaid on the Lips-Wiersma and Morris (2009) model of meaningful work.

Work Influence and Affiliation

Another new construct that arose in this study was named *Work Influence and Affiliation*. This construct was formed from the original Affiliation Commitment items (AFF 1, 2) from the Organizational Commitment scale (Balfour & Wechsler, 1996), impact items (Emp1-3I) from the Empowerment at Work scale by Spreitzer (1995), and one growth satisfaction item (GRWTHSAT3) from Hackman and Oldham's Job Diagnostic Survey (1974). Although the six items corresponded to three of the constructs in Lips-Wiersma and Morris' (2009) model of meaningful work (Developing and Becoming Self, Serving Others, and Unity with Others), reading the items and looking at the strength of the factor loadings led the researcher to use only Serving Others and

Unity with Others in the workplace (that is, being with others in community) for interpreting this construct (see Figure 9).

The growth satisfaction item (GRWTHSAT3) that loaded on this construct was originally placed in the quadrant on Developing and Becoming Self with other growth satisfaction items; however, the wording of the item could easily align with a *doing* and *others* orientation. The item was worded, "I am satisfied with the amount of independent thought and action I can exercise in my job." Other sample items from this new construct included, "I feel a strong sense of belonging to this organization" and "My impact on what happens in my department is large." Based on these item descriptions, the researcher named the construct to represent an employee's sense of influence (making a difference, having impact, being influential) and affiliation (being part of the community) in the workplace. The changes in the meaningful work constructs from the original (four constructs) to the revised model (with two constructs) are shown in Figure 10.

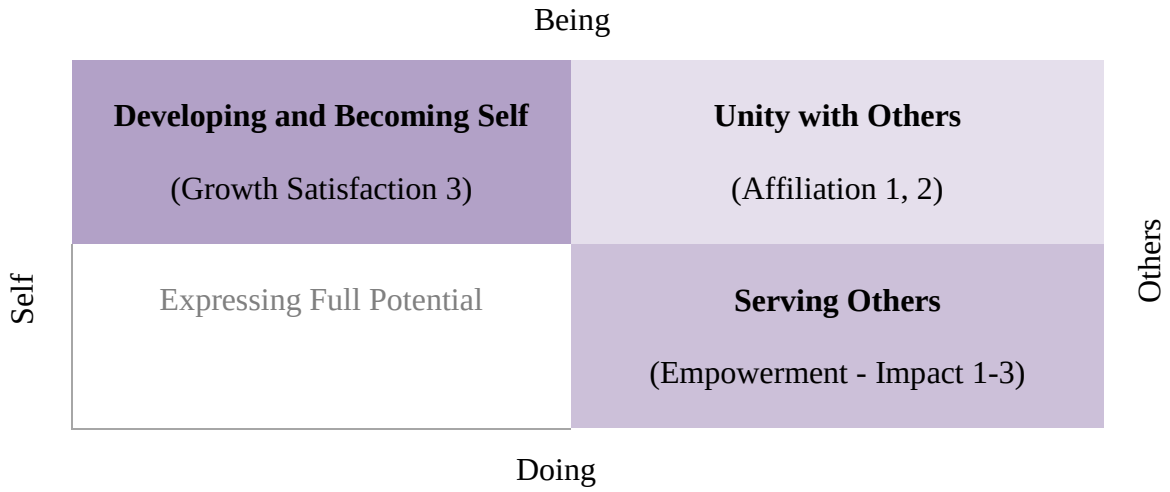

Figure 9. The Work Influence and Affiliation manifest variables overlaid on the Lips-Wiersma and Morris (2009) model of meaningful work.

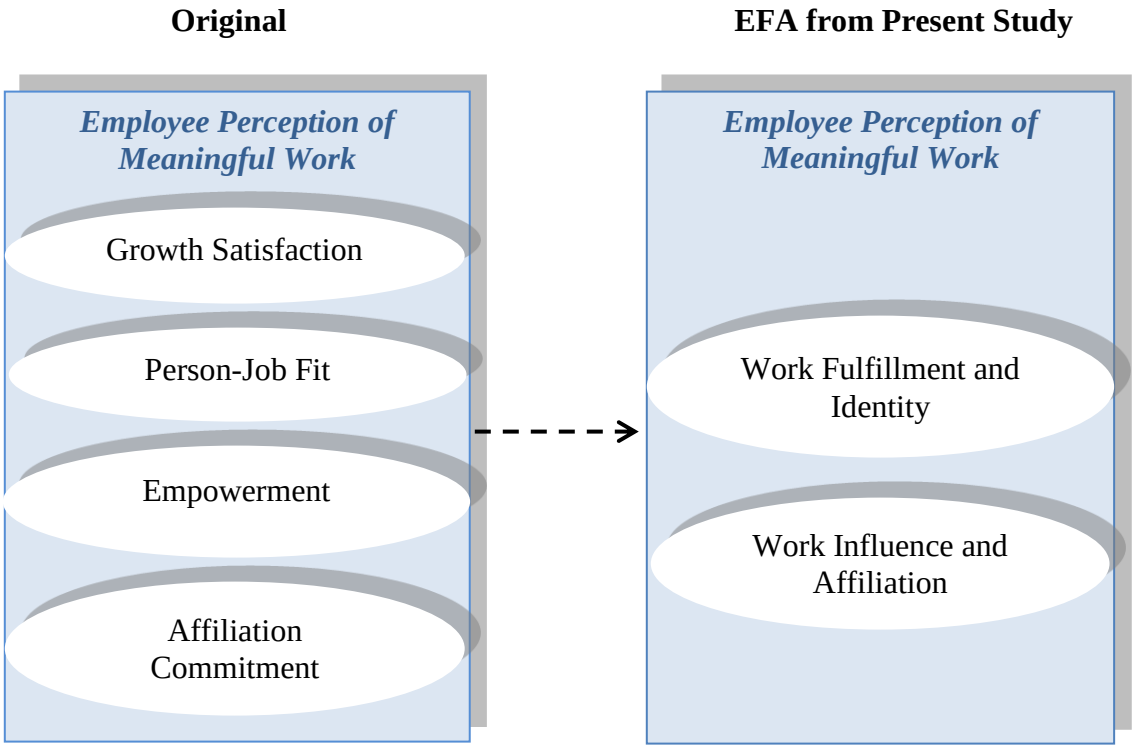

Figure 10. The four meaningful work constructs in the original hypothesized model of middle manager leadership vs. the Work Fulfillment and Identity and Work Influence and Affiliation constructs from exploratory factor analysis in the present study.

Personal Industry and Interpersonal Helping

Organizational Citizenship Behavior (personal industry and interpersonal helping items) was, in this study, proposed as a single construct, representing a performance driver in higher education. The nine items, however, did not load onto a single construct for the obtained data. Two constructs emerged, based on the subscales described by Moorman and Blakely (1995): *Personal Industry* and *Interpersonal Helping*. Personal Industry included four items (OCB1-4PI). A sample item stated, "I rarely miss work even when I have a legitimate reason for doing so." Interpersonal Helping was

comprised of five items (OCB1-5IH) with a sample item being, “I go out of my way to help co-workers with work-related problems.”

Learning Goal Orientation and Intention to Turnover

Based on previous research (Bretz & Judge, 1994; Meyer et al., 2002; Payne et al., 2007; Sablynski et al., 2002; Seibert et al., 2011; Steers & Mowday, 1981), two other performance drivers were hypothesized to relate to employees’ perceptions of middle manager leadership behavior and meaningful work: Learning Goal Orientation and Intention to Turnover. The Learning Goal Orientation construct, based on the scale developed by VandeWalle (1997), consisted of five items (LGO1-5). A sample item included, “I am willing to select a challenging work assignment that I can learn a lot from.” This construct represented an employee’s willingness to improve and test their competence level in the workplace by taking on challenging assignments and gaining knowledge and skills in new areas – succeeding (as well as failing at times) in order to do so.

Intention to Turnover included the three intention to turnover items (IT1-3). A sample item included, “I frequently think of quitting my job.” Intention to Turnover was conceptualized as an employee’s contemplation of acquiring a new job, instead of persisting in the current position. No changes were made to the original constructs of Learning Goal Orientation and Intention to Turnover, since the items loaded onto constructs in accordance with the findings of previous researchers (Colarelli, 1984; Shuck, 2010; Shuck, Reio, & Rocco, 2011; VandeWalle, 1997).

The reader may visualize how the original model of middle manager leadership was revised for the selected performance drivers (as a result of the exploratory factor analysis) by reviewing Figure 11. The original model proposed three performance drivers: Learning Goal Orientation, Organizational Citizenship Behavior, and Intention to Turnover. The revised model included four performance drivers in higher education: Learning Goal Orientation; Interpersonal Helping and Personal Industry, originally represented by Organizational Citizenship Behavior; and, Intention to Turnover.

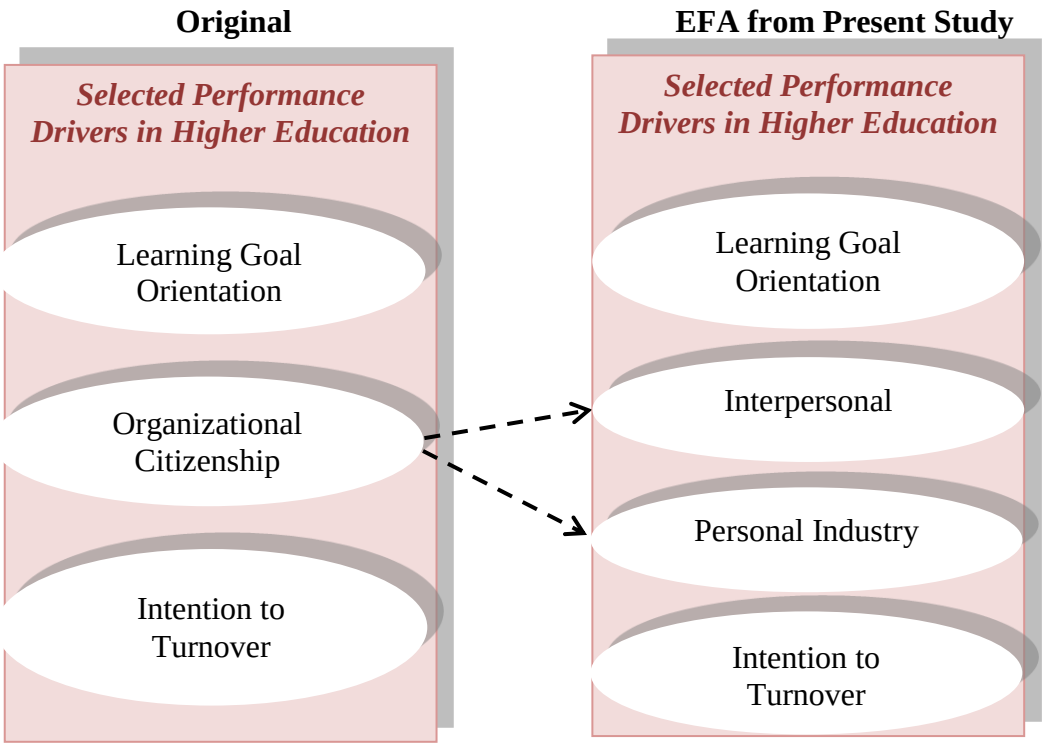

Figure 11. Three constructs represent selected performance drivers in higher education in the original hypothesized model of middle manager leadership vs. four constructs in the revised model, as a result of exploratory factor analysis.

Reliability of Revised Constructs

Reliability coefficients were obtained for each of the revised constructs, as well as for the instrument as a whole. Each construct, as well as the instrument, demonstrated moderate to high internal consistency, as reported in Table 9. Reliability coefficients ranged from Cronbach's α=.75 to .935 for individual constructs. The instrument, as a whole (42 items), had a coefficient alpha of .922. All constructs had a suggested minimum of 3 items.

Table 9. Revised Constructs with Range of Item Construct Loadings and Reliability Coefficients

Constructs	Item Abbreviations	Number of Items	Range of Construct Loadings	Cronbach's Alpha
Cooperative Leadership	SuppLead 1-5 PartLead 1-5	10	.639-.866	0.935
Work Fulfillment & Identity	GrowSat 1,2, 4 EmpMean 1-3 PJFit 1,3,4	9	.477-.873	0.929
Work Influence & Affiliation	GrowSat 3 EmpImpact 1-3 AffComm 1,2	6	.474-.781	0.916
Learning Goal Orientation	LrnGO 1-5	5	.751-.856	0.885
Interpersonal Helping	OCBIH 1-5	5	.530-.830	0.794
Personal Industry	OCBPI 1-4	4	.584-.754	0.750
Intention to Turnover	ITurn 1-3	3	-(.638-.751)	0.804
Total Instrument		42		0.922

Correlation Analysis

Intercorrelations of the derived factors were examined as a means of checking the goodness of the exploratory factor analytic solution, as well as to ascertain the presence or absence of multicollinearity. Intercorrelations were obtained by conducting a correlation analysis (using the Pearson correlation coefficient). Significance of the correlations was tested at the .05 alpha level ($p<.05$, 2-tailed). The correlation matrix, means, and standard deviations of the constructs are presented in Table 10. The range of scores for each construct is also included to aid interpretation of the mean, since the constructs had varying Likert-type scales.

Correlation coefficients for all constructs were significant. Pearson zero-order correlation coefficients were judged to be low (±.10 to .29), moderate (±.30 to .49), or high (±.50 to 1.0), based on Cohen's (1988) guidelines. The absolute correlations between Learning Goal Orientation and the other six constructs ranged from low to moderate (r=-.093 to r=.408; Cohen, 1988). Intention to Turnover was moderately to highly correlated with Cooperative Leader Behavior (r=-.444), Work Influence and Affiliation (r=-.575), and Work Fulfillment and Identity (r=-.617); it had little to no correlations with Learning Goal Orientation (r=-.093), Interpersonal Helping (r=-.127), and Personal Industry (r=-.151; Cohen, 1988). Personal Industry was significantly correlated with all other constructs with absolute values ranging from .151 to .480 (low to moderate; Cohen, 1988). Correlation coefficients for Interpersonal Helping ranged from a low of -.127 to a moderate value of .480 (Cohen, 1988).

The absolute correlation coefficient values for Work Fulfillment and Identity ranged from low to high (r=.267 to r=.757; Cohen, 1988), with the highest correlations being with Work Influence and Affiliation (r=.757), Cooperative Leadership (r=.580), and Intention to Turnover (r=-.575). Cooperative Leader Behavior was significantly correlated with the other six constructs with correlation coefficients ranging from .137 to .580 (low to high absolute values; Cohen, 1988). The highest correlations for Cooperative Leader Behavior were with Work Influence and Affiliation (r=.580), Intention to Turnover (r=-.444), and Work Fulfillment and Identity (r=.440). Work Influence and Affiliation was also correlated with the other six constructs and had correlation coefficients ranging from .233 to .757 (low to high; Cohen, 1988).

Table 10. Descriptive Statistics and Zero-Order Correlations of Revised Model Constructs

	1	2	3	4	5	6	7
Score Range	5-30	3-15	9-57	5-35	4-28	10-70	6-42
Mean	25.76	6.81	43.80	28.80	23.47	50.36	30.54
SD	3.621	3.550	9.438	4.343	3.317	12.870	8.296
1. LGO	1.000	-	-	-	-	-	-
2. IT	-.093*	1.000	-	-		-	-
3. WF&I	.280*	-.617*	1.000	-	-	-	-
4. IH	.395*	-.127*	.267*	1.000	-	-	-
5. PI	.408*	-.151*	.302*	.480*	1.000	-	-
6. CL	.140*	-.444*	.440*	.137*	.162*	1.000	-
7. WI&A	.251*	-.575*	.757*	.233*	.256*	.580*	1.000

This table presents the range, mean, standard deviations and Pearson r correlation of constructs examined in this study. Low scores indicate disagreement, while high scores indicate agreement, with survey item.
1=Learning Goal Orientation, 2=Intention to Turnover, 3=Work Fulfillment & Identity, 4=Interpersonal Helping, 5=Personal Industry, 6 =Cooperative Leader Behavior, 7=Work Influence & Affiliation

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

All correlations were positive with the other constructs except those for Intention to Turnover, which were consistently negative. Negative correlations between each of the constructs and Intention to Turnover were hypothesized based on prior research. As a result, the researcher anticipated that middle managers employing cooperative leader behaviors and employees with higher perceptions of meaningful work would correlate with fewer employee intentions to turnover.

While Work Influence and Affiliation and Work Fulfillment and Identity correlated more strongly than the researcher would prefer (r=.757), it still satisfied the guidelines presented by Kline (2011) and simple structure had been obtained via exploratory factory analysis (EFA). EFA had been performed using principal components analysis with a varimax rotation which should result in constructs that are maximally independent of each other (Meyers et al., 2013). To ensure that the best solution resulted from the EFA, the researcher also attempted an oblique rotation. Although loadings varied slightly from the previous varimax rotation, the ultimate factor structures were no different.

Except for the correlations between Work Fulfillment and Identity and Work Influence and Affiliation (r=.757), correlation coefficients were less than .700. Kline (2011) gives r=.85 as a measure of extreme collinearity, while Meyers et al. (2013) recommend that correlation coefficients between the mid .7s to .800 may create problems in multivariate analyses. Additionally, and as mentioned previously, Bartlett's test of sphericity was significant at $p<.001$, indicating that the correlation matrix was not proportional to an identity matrix and that some relationships existed between constructs

(Tabachnick & Fidell, 1996). Based on the obtained correlation coefficients, a significant result for Bartlett's test of sphericity, and low communalities (ranging from .410 to .850 with an average communality of .676; see Table 6), the data were judged to be free of multi-collinearity.

Re-Constituting Study Hypotheses

Due to the revision of the study constructs, it was also necessary to revise the hypotheses associated with the conceptual model (relating non-academic middle manager leader behaviors to employee perceptions of meaningful work and selected performance drivers in higher education) before proceeding to full SEM. The revised hypotheses utilized letters in place of numbers to distinguish them from the original hypotheses. The original 15 hypotheses are included below as a reference.

Hypothesis 1: The relationship between participative leadership behaviors and intention to turnover will be negative and significantly different from zero.

Hypothesis 2: The relationship between participative leadership behaviors and growth satisfaction will be positive and significantly different from zero.

Hypothesis 3: The relationship between participative leadership behaviors and perceived person-job fit will be positive and significantly different from zero.

Hypothesis 4: The relationship between participative leadership behaviors and empowerment (meaning and impact items) will be positive and significantly different from zero.

Hypothesis 5: The relationship between supportive leadership behaviors and growth satisfaction will be positive and significantly different from zero.

Hypothesis 6: The relationship between supportive leadership behaviors and affiliation commitment will be positive and significantly different from zero.

Hypothesis 7: The relationship between supportive leadership behaviors and intention to turnover will be negative and significantly different from zero.

Hypothesis 8: The relationship between growth satisfaction and learning goal orientation will be positive and significantly different from zero.

Hypothesis 9: The relationship between person-job fit and learning goal orientation will be positive and significantly different from zero.

Hypothesis10: The relationship between growth satisfaction and intention to turnover will be negative and significantly different from zero.

Hypothesis 11: The relationship between person-job fit and intention to turnover will be negative and significantly different from zero.

Hypothesis 12: The relationship between empowerment and intention to turnover will be negative and significantly different from zero.

Hypothesis 13: The relationship between affiliation commitment and organizational citizenship behavior will be positive and significantly different from zero.

Hypothesis 14: The relationship between affiliation commitment and intention to turnover will be negative and significantly different from zero.

Hypothesis 15: The relationship between growth satisfaction and person-job fit will be positive and significantly different from zero.

Using the prior research presented in Chapter II, logic, and the results of the exploratory factory analysis (EFA), the following nine revised hypotheses were developed (see Figure 12 for a visual depiction of the revised conceptual model):

Hypothesis A: The relationship between Cooperative Leadership behaviors and Intention to Turnover will be negative and significantly different from zero (Angermeier, Dunford, Boss, & Boss, 2009).

Hypothesis B: The relationship between Cooperative Leadership behaviors and Work Fulfillment and Identity will be positive and significantly different from zero (Fisher & Edwards, 1988; Huang et al. 2010; Kim, 2002; Wofford & Liska, 1993).

Hypothesis C: The relationship between Cooperative Leadership behaviors and Work Influence and Affiliation will be positive and significantly different from zero (Huang et al., 2010; Mathieu & Zajac, 1990; Meerhans et al., 2008; Wofford & Liska, 1993).

Hypothesis D: The relationship between Work Fulfillment and Identity and Learning Goal Orientation will be positive and significantly different from zero (Payne et al, 2007).

Hypothesis E: The relationship between Work Fulfillment and Identity and employee Intention to Turnover will be negative and significantly different from zero (Bretz & Judge, 1994; Seibert et al., 2011; Steers & Mowday, 1981).

Hypothesis F: The relationship between Work Fulfillment and Identity and Personal Industry will be positive and significantly different from zero (Podsakoff, MacKenzie, Paine, & Bachrach., 2000).

Hypothesis G: The relationship between Work Influence and Affiliation and employee Intention to Turnover will be negative and significantly different from zero (Meyer et al., 2002; Sablynski et al., 2002; Seibert et al., 2011).

Hypothesis H: The relationship between Work Influence and Affiliation and Personal Industry will be positive and significantly different from zero (Meierhans et al., 2008; Organ & Ryan, 1995).

Hypothesis I: The relationship between Work Influence and Affiliation and Interpersonal Helping will be positive and significantly different from zero (Meierhans et al., 2008; Organ & Ryan, 1995).

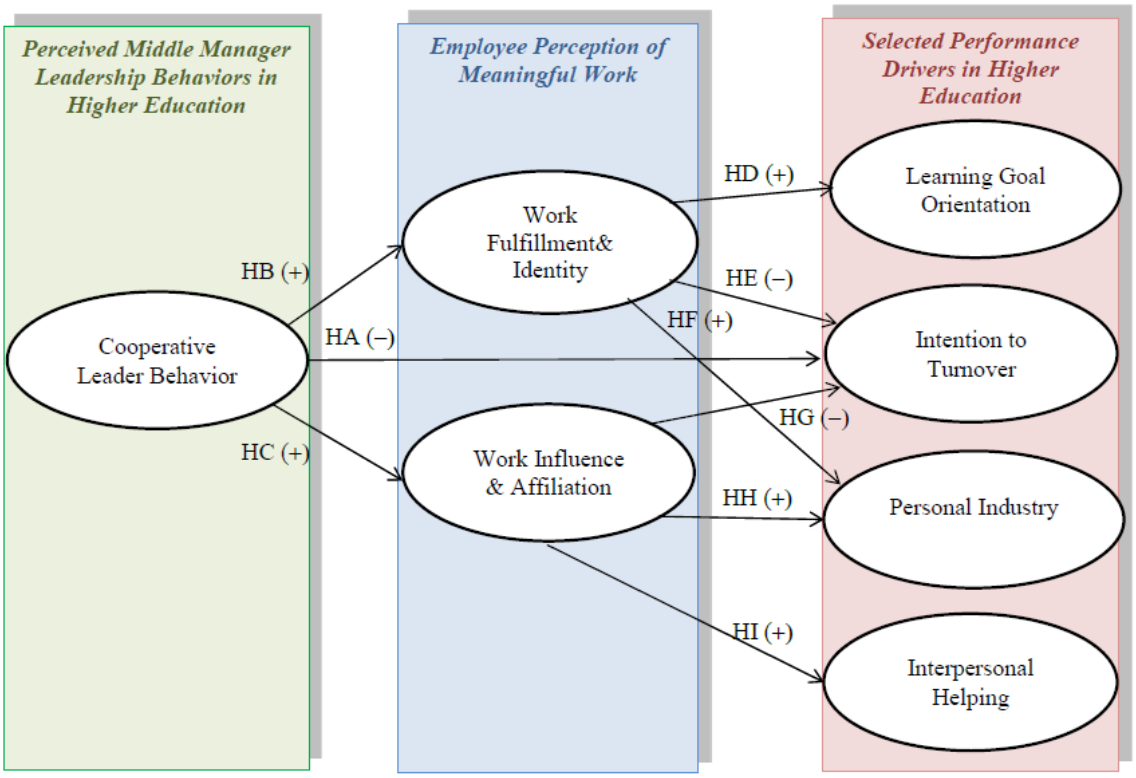

Figure 12. Reconceptualized model of middle manager leadership with employee perceptions of meaningful work and selected performance drivers in higher education.

Structural Equation Modeling

SEM was conducted in two phases. In step one, the researcher tested the measurement model, while in step two the structural model was evaluated. In both steps, model fit was judged by several fit indices, including the Chi-square goodness of fit (χ^2, degrees of freedom, χ^2/df, $p<.05$); Comparative Fit Index (CFI); the Tucker-Lewis Fit Index (TLI); Root Mean Square Error of Approximation (RMSEA); and, Standardized Root Mean Square Residual (SRMR; Hu & Bentler, 1999; Kline, 2011). The results for both steps will be described in the following sections.

Measurement Model

Confirmatory factor analysis (CFA), one component of SEM, was conducted to judge the goodness of fit of the measurement model. The measurement model, using MPLUS, assessed how well the observed items/indicators represented the latent constructs. The fit between the data and the proposed measurement model (where indicators were linked to their respective latent construct) was statistically tested.

The results of the revised, seven construct measurement model is presented in Figure 13. Standardized factor loadings for the items on each construct, interpreted as regression coefficients, were all above minimum criteria (.32 and higher) cited by Tabachnick and Fidell (1996) and mostly above the criteria for strong loadings (.5 or above). Factor loadings ranged from .464 (OCBIH4 on IH) to .900 (PartLead2 on CL). The coefficients for these paths were all significant ($p<.05$ and $p<.01$). High loadings were indicative that the observed items were good representatives of the construct. Significance, with coefficients greater than .3, demonstrated meaningful significance (Meyers et al., 2013). Furthermore, the revised constructs demonstrated acceptable fit using standard criteria (CFI and TLI > .90, RMSEA < .06, and SRMR < .08; Hu & Bentler, 1999). Because of the large sample size, Chi-square significance was not used to judge model fit, since large data sets are more likely to demonstrate significant differences (Kline, 2011). As a result of obtaining acceptable fit, the hypothesized model was judged to be a good fit of the observed data set (i.e., the 42 measured items were reasonable manifestations of the identified, underlying constructs), thus, allowing the researcher to proceed to analysis of the structural model.

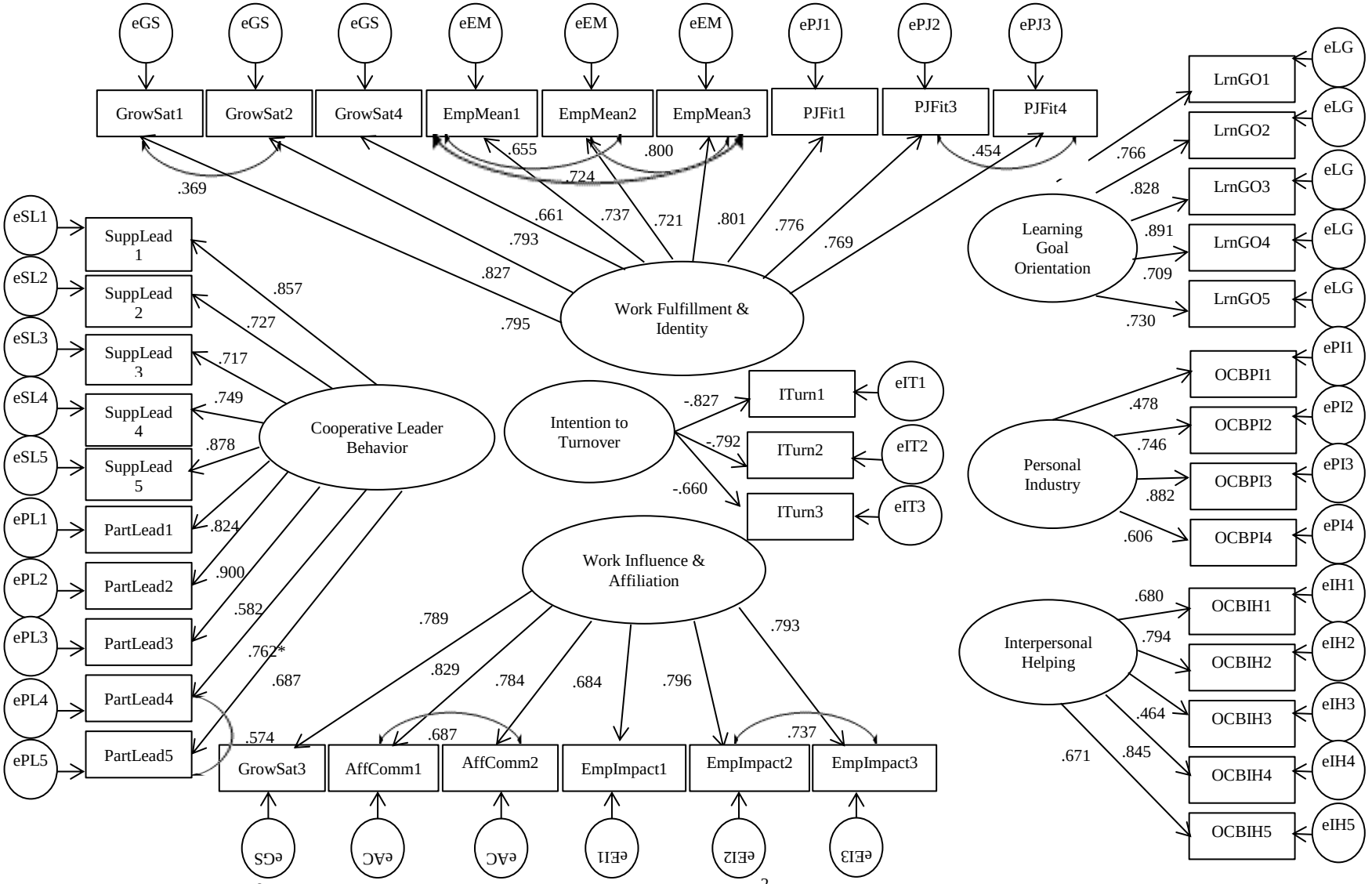

Figure 13. Modified seven construct measurement model results. χ^2=3201.228 (790)=4.052, p=.000; CFI=.942; TLI=.937; RMSEA .048; SRMR=.049. Note: * Significant at p<.05 and p<. 01.

Structural Model

Following verification of the measurement model, the structural model was analyzed by inputting all constructs simultaneously into MPLUS. To examine the relationships between and among perceptions of non-academic middle manager leader behavior, employee perceptions of meaningful work, and selected performance drivers in higher education, paths were established between the various constructs – Cooperative Leader Behavior (middle management leader behavior); Work Influence and Affiliation and Work Fulfillment and Identity (the constructs representing meaningful work); and, Learning Goal Orientation, Intention to Turnover, Personal Industry, and Interpersonal Helping (the selected performance drivers in higher education), based on the revised hypotheses established from the literature (see Figure 12).

The full path model is presented in Figure 14, including standardized coefficients for the hypothesized paths, significant paths ($p<.05$ and $p<.01$), and residual variance for the endogenous constructs. All paths, except the path between Work Influence and Affiliation and Personal Industry, were statistically significant. For the full sample, the model yielded poor fit, particularly for SRMR, which was below the desired value of .08 (Hu & Bentler, 1999): χ^2=4145.282[797]= 5.201, p=0.000; CFI=0.919; TLI=0.913; RMSEA 0.056; SRMR=0.100.

Modification indices (M.I.) were examined to see where paths could be added or removed for improved fit. By far, the largest M.I. (664.271) was for an added bi-directional path between Work Influence and Affiliation and Work Fulfillment and Identity. Since such a path could logically be supported based on the meaningful work

research literature (Lips-Wiersma & Morris, 2009), the researcher pursued this change (shown in Figure 15).

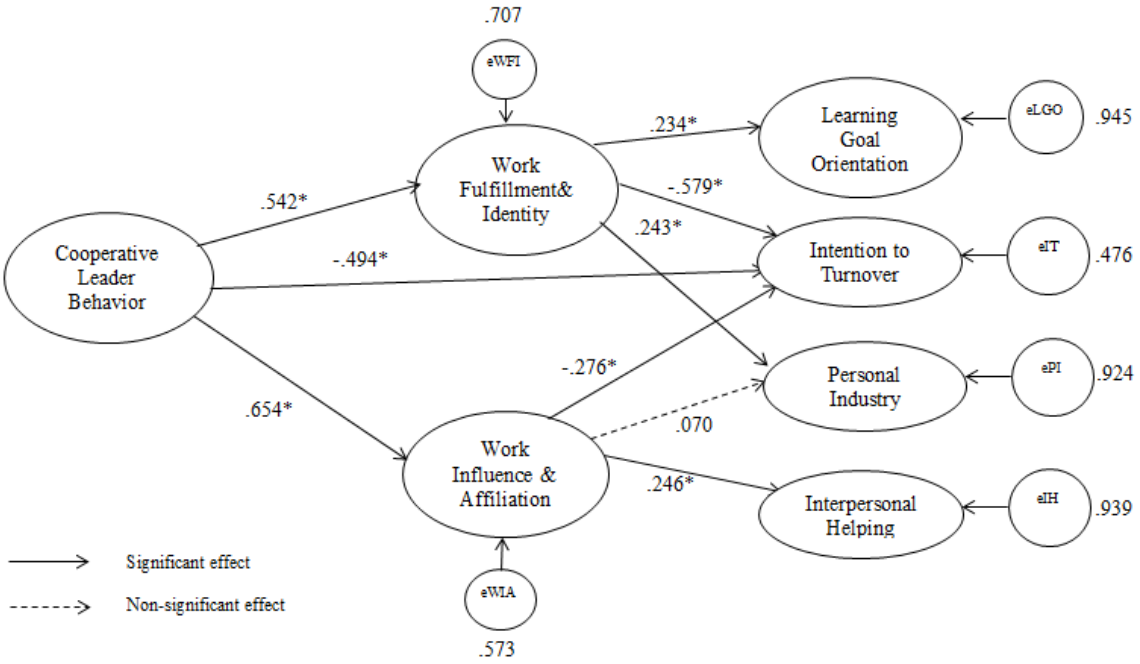

Figure 14. Initial seven construct structural model results. χ^2=4145.282[797]= 5.201, p=0.000; CFI=0.919; TLI=0.913; RMSEA 0.056; SRMR=0.100. Notes: * Significant at p=.05 and .01 levels.

Kline (2011) strongly recommends that, when aiming for improved fit, paths should be added or removed in single steps. After each change, the model should be re-evaluated for fit before considering any further changes. This protocol was followed. A bi-directional path was added between Work Fulfillment and Identity and Work Influence and Affiliation, and the structural model was reanalyzed in MPLUS.

The final, modified path model for the seven revised constructs is presented in Figure 15, including standardized coefficients for the hypothesized paths, significant paths (p<.05 and p<.01), residual variance for the endogenous constructs (Work Fulfillment and Identity, Work Influence and Affiliation, Learning Goal Orientation, Intention to Turnover, Personal Industry, and Interpersonal Helping), and added paths based on modification indices. As noted for the initial structural model, all paths (except the path between Work Influence and Affiliation and Personal Industry) were statistically significant at the p<.05 and p<.01 levels. For the full sample, the model yielded acceptable fit: χ^2=3246.397 [796]=4.078, p<.01; CFI=.941; TLI=.936; RMSEA .048; SRMR=.051.

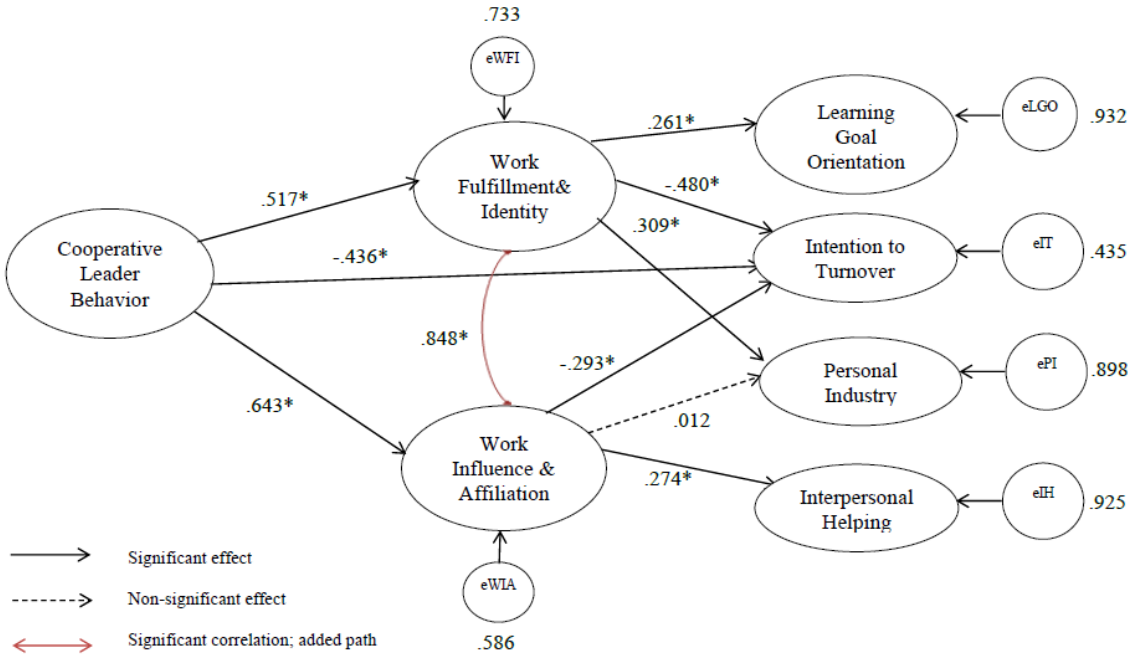

Figure 15. Final, modified seven construct structural model results. χ^2=3246.397 [796]=4.078; p=0.000; CFI=.941; TLI=.936; RMSEA .048; SRMR=.051;. Notes: * Significant at p=.05 and .01 levels; red arrow shows added path.

The added path resulted in a large change in the value of the fit index, SRMR (.10 for the initial model compared to .051 for the final model), moving it from poor to good fit, according to Hu and Bentler's (1999) minimum criteria to evaluate fit (good models <.08). The added path resulted in minimal changes for RMSEA (.056 for the initial model compared to .048 for the final model), CFI (.919 for the initial compared to .942 for the final model) and TLI (.913 for the initial compared to .937 for the final model). These changes did not alter the goodness of fit evaluation, since RMSEA was <.06 in both models, indicative of good fit (Hu & Bentler, 1999). CFI and TLI were >.90 but <.95 in both models, indicative of acceptable fit (Hu & Bentler, 1999).

Standardized path coefficients, ranged from β=.012 (a non-significant path for Personal Industry on Work Influence and Affiliation) to β=.848, $p<.05$ (the added bi-directional path between Work Fulfillment and Identity and Work Influence and Affiliation). Work Fulfillment and Identity and Work Influence and Affiliation were highly correlated predictors (β=.848, $p<.05$) of the selected performance drivers. Cooperative Leader Behavior served as a significant predictor of both Work Fulfillment and Identity (β=.517, $p<.05$) and Work Influence and Affiliation (β=.643, $p<.05$), as well as of the selected performance driver, Intention to Turnover (β=-.436, $p<.05$). The model explained approximately 41% of the variance in Work Influence and Affiliation and 27% of the variance in Work Fulfillment and Identity; 7% of the variance in Learning Goal Orientation, 57% of the variance in Intention to Turnover, 10% of the variance in Personal Industry, and 8% of the variance in Interpersonal Helping. Results of the structural model will be addressed further in Chapter V.

Summary

In this chapter, the researcher reported the results of the data analysis, including a comparison of the sample and population demographic data and descriptive statistics of the response items. Reliability for the nine constructs as proposed in theory were reviewed, along with a testing of the measurement model for these constructs. Poor fit of the theorized measurement model led to the use of exploratory factor analysis to reformulate the relationships between indicators and the underlying constructs for university, non-academic employees. The researcher, guided by EFA results and reliability coefficients, accepted seven, revised constructs: Cooperative Leadership, Work Fulfillment and Identity, Work Influence and Affiliation, Learning Goal Orientation, Personal Industry, Interpersonal Helping, and Intention to Turnover. Structural equation models (confirmatory factor analysis and path analysis) were fitted to affirm the placement of observed variables/indicators on their respective constructs and to examine how Cooperative Leader Behavior influenced Work Fulfillment and Identity and Work Influence and Affiliation as predictors of Learning Goal Orientation, Personal Industry, Interpersonal Helping, and Intention to Turnover. The researcher reported the outcomes of the measurement model and structural model through the use of SEM. Ultimately, the researcher presented a model with good fit that may be used to explain the relationships among higher education non-academic middle management leader behavior, employee perceptions of meaningful work, and selected, self-reported employee performance drivers, such as Learning Goal Orientation, Personal Industry, Interpersonal Helping, and Intention to Turnover.

In the final chapter, the researcher summarizes and discusses the results, implications, and significance of the measurement and structural models. Further, the limitations and strengths of this study are considered. The dissertation concludes with considerations for future research and an overall summary of the study.

CHAPTER V

SUMMARY, CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

Today's higher education context demands employees who are willing to challenge themselves, engage in continuous learning, go above and beyond minimal job expectations, and persist with their employing organization (Johnsrud, Heck, & Rosser, 2000; Smerek & Peterson, 2007). Helping employees perceive their work as meaningful provides one potential means to achieve these selected performance drivers – meaningful workplaces are places where employees learn, grow and develop their full potential, express themselves through work, develop a sense of belonging, and serve others (Lips-Wiersma & Morris, 2009). But how can higher education institutions foster employee perceptions of meaningful work? It is through the leadership role played by middle managers, who engage directly and daily with employees (and with other key stakeholders) and who help translate the institutional strategies and directives, where the most influential source of nurturing employee perceptions of meaningful work is found (Rosser, 2000; Smerek & Peterson, 2007).

This chapter is divided into several sections. First, a summary of the study, including the purpose of this study, research question, and methods is provided. In the next section, titled *Discussion*, the results of the study are discussed in the context of related, published literature. Study conclusions are then presented followed by the limitations and strengths of the study. In the section following conclusions, implications

for research, theory and practice are addressed. Finally, recommendations for future research and an overall summary of the dissertation are provided.

Summary of the Study

The purpose of this study was to examine the relationships among non-academic middle manager leader behavior, meaningful work, and selected performance drivers as perceived by employees in a four-year public institution of higher education located in the southwestern United States. Specifically the researcher explored the research question,

> *What are the relationships between and among perceived participative and supportive leadership behaviors, employee perceptions of meaningful work, and selected performance drivers as reported by public higher education employees?*

A review of the literature led to the development of a theoretical model, with 15 hypotheses:

Hypothesis 1: The relationship between participative leadership behaviors and intention to turnover will be negative and significantly different from zero.

Hypothesis 2: The relationship between participative leadership behaviors and growth satisfaction will be positive and significantly different from zero.

Hypothesis 3: The relationship between participative leadership behaviors and perceived person-job will be positive and significantly different from zero.

Hypothesis 4: The relationship between participative leadership behaviors and empowerment (meaning and impact items) will be positive and significantly different from zero.

Hypothesis 5: The relationship between supportive leadership behaviors and growth satisfaction will be positive and significantly different from zero.

Hypothesis 6: The relationship between supportive leadership behaviors and affiliation commitment will be positive and significantly different from zero.

Hypothesis 7: The relationship between supportive leadership behaviors and intention to turnover will be negative and significantly different from zero.

Hypothesis 8: The relationship between growth satisfaction and learning goal orientation will be positive and significantly different from zero.

Hypothesis 9: The relationship between person-job fit and learning goal orientation will be positive and significantly different from zero.

Hypothesis10: The relationship between growth satisfaction and intention to turnover will be negative and significantly different from zero.

Hypothesis 11: The relationship between person-job fit and intention to turnover will be negative and significantly different from zero.

Hypothesis 12: The relationship between empowerment and intention to turnover will be negative and significantly different from zero.

Hypothesis 13: The relationship between affiliation commitment and organizational citizenship behavior will be positive and significantly different from zero.

Hypothesis 14: The relationship between affiliation commitment and intention to turnover will be negative and significantly different from zero.

Hypothesis 15: The relationship between growth satisfaction and person-job fit will be positive and significantly different from zero.

A 45-item instrument was constructed from previously existing instruments. It was distributed to a population of 4, 235 higher education employees in the sponsoring institution. Data from the 1, 333 respondents were analyzed using descriptive statistics (in SPSS), exploratory factor analysis (in SPSS), and structural equation modeling (in MPLUS).

An initial test of the measurement model for the nine theoretical constructs (Supportive Leader Behavior, Participative Leader Behavior, Empowerment, Growth Satisfaction, Person-Job Fit, Affiliation Commitment, Learning Goal Orientation, Organizational Citizenship Behavior, and Intention to Turnover) showed poor fit, thus exploratory factor analysis was used to revise the constructs. Ultimately, seven new constructs were developed from 42 of the 45 original items: Cooperative Leadership, Work Fulfillment and Identity, Work Influence and Affiliation, Learning Goal Orientation, Personal Industry, Interpersonal Helping, and Intention to Turnover. Nine hypotheses were established to represent the relationships between the revised seven constructs:

Hypothesis A: The relationship between Cooperative Leadership behaviors and Intention to Turnover will be negative and significantly different from zero.

Hypothesis B: The relationship between Cooperative Leadership behaviors and Work Fulfillment and Identity will be positive and significantly different from zero.

Hypothesis C: The relationship between Cooperative Leadership behaviors and Work Influence and Affiliation will be positive and significantly different from zero.

Hypothesis D: The relationship between Work Fulfillment and Identity and Learning Goal Orientation will be positive and significantly different from zero.

Hypothesis E: The relationship between Work Fulfillment and Identity and employee Intention to Turnover will be negative and significantly different from zero.

Hypothesis F: The relationship between Work Fulfillment and Identity and Personal Industry will be positive and significantly different from zero.

Hypothesis G: The relationship between Work Influence and Affiliation and employee Intention to Turnover will be negative and significantly different from zero.

Hypothesis H: The relationship between Work Influence and Affiliation and Personal Industry will be positive and significantly different from zero.

Hypothesis I: The relationship between Work Influence and Affiliation and Interpersonal Helping will be positive and significantly different from zero.

Structural equation models were fitted to examine how Cooperative Leader Behavior influenced Work Fulfillment and Identity and Work Influence and Affiliation as predictors of Learning Goal Orientation, Personal Industry, Interpersonal Helping, and Intention to Turnover. First, the 42 items loaded onto their respective constructs were a good fit of the measurement model according to standard fit criteria. Next, the structural model, with paths established according to the nine, revised hypotheses, was a poor fit. Reviewing the modification indices, and making logical assumptions based on a conceptual understanding of the constructs and previously obtained data results, led the researcher to add a bi-directional path between Work Influence and Affiliation and Work

Fulfillment and Identity. The final structural model, with the addition of this path, had acceptable fit.

Discussion

Test of the Measurement Model

The test of the initial measurement model using the nine theoretical constructs (Participative Leader Behavior, Supportive Leader Behavior, Growth Satisfaction, Empowerment, Person- Job Fit, Affiliation Commitment, Learning Goal Orientation, Organizational Citizenship Behavior, and Intention to Turnover) resulted in poor fit (χ^2=7721.246 [909]=8.494, p=.000; CFI=.843; TLI=.829; RMSEA=.075; SRMR=.077). Thus, the initial proposed model was not supported by the data. Based on Thompson and Daniel (1996), the researcher chose to employ exploratory factor analysis (EFA) as the means to examine the factor structure and improve the fit of the measurement model. Based on the results obtained through EFA, the 10 items that initially represented Participative Leader Behavior and Supportive Leader Behavior were combined into a single factor, named Cooperative Leader Behavior.

Furthermore, the 18 items that represented the four meaningful work constructs (Growth Satisfaction, Empowerment, Person- Job Fit, Affiliation Commitment) were collapsed into two constructs (Work Fulfillment and Identity and Work Influence and Affiliation). Three of the 18 items that originally represented the meaningful work constructs Affiliation Commitment and Person- Job Fit were removed from the survey: 1) Affiliation Commitment, Item 3 (AFF3): *...people I work for do not care about what happens to me*, 2) Person-Job Fit, Item 2 (PJFIT2): *...feel competent and fully able to*

handle my job, and 3) Person-Job Fit, Item 5 (PJFIT5): ...*feel I have adequate preparation for the job I now hold*. Affiliation Commitment, Item 3 was removed because it did not load onto any construct at a level of .45 or greater. The decision to suppress factor loadings less than .45 had been made prior to conducting exploratory factor analysis. While the range for suppression is generally between .3 and .5 (Tabachnick & Fidell, 1996), the researcher chose a number at the higher end of the range in order to simplify the structure as much as possible, while recognizing that .5 might result in losing some information.

Person-Job Fit, Item 2 and Person-Job Fit, Item 5 did load onto a single construct, Component 8. This construct had the lowest eigenvalue (1.068) and explained 2.373% of the variance of the factor space. Many researchers indicate that a minimum of three manifest variables are required to comprise a sound construct (Anderson & Rubin, 1956). This rule-of-thumb, along with evidence that reliability for the two-item construct was low (Cronbach's α=.677) guided the decision to remove this construct from the study.

The constructs which represented selected performance drivers in higher education (Learning Goal Orientation, Organizational Citizenship Behavior, and Intention to Turnover) changed little from how they were originally presented in the literature and conceptualized in this study. The five items representing Learning Goal Orientation loaded acceptably onto their respective construct. The three items associated with Intention to Turnover also had acceptable loadings onto the Intention to Turnover construct. Only Organizational Citizenship Behavior (OCB) required revision, as the

EFA indicated that OCB represented two separate factors, which were named from their original subscales (Moorman and Blakely, 1995): Personal Industry (4 items) and Interpersonal Helping (5 items).

Revision of the study constructs also required re-establishment of hypotheses and re-testing the measurement model. The original 15 hypotheses were revised into 9 hypotheses to align with the new constructs. Also, the revised, seven construct measurement model had acceptable fit for all indices except Chi-square significance, using common fit criteria: χ^2= 3201.228 [790]=4.052, p=0.000; CFI=.942; TLI=.937; RMSEA .048; SRMR=.049. Chi-square significance was reported based on the recommendation of Kline (2011), but because of its sensitivity to large sample sizes (being more likely to report significance) it was not used to judge model fit. In the next section, the study results will be discussed for each proposed hypothesis.

Test of the Structural Model and Study Hypotheses

Once a good fit of the revised, measurement model was obtained, the structural model could be tested and hypotheses evaluated. Overall eight of the nine hypotheses were supported.

Hypothesis A: The Relationship between Cooperative Leader Behavior and Intention to Turnover Will Be Negative and Significantly Different from Zero

Hypothesis A was formulated for investigating the relationship between Cooperative Leader Behavior and Intention to Turnover. Angermeier, Dunford, Boss, and Boss (2009) reported lower intentions to turnover for employees in participative work environments, while Dixon and Hart (2010) found a significant, negative

relationship between supportive leadership and intention to turnover. Based on these results, Cooperative Leader Behavior was hypothesized to be significantly and negatively correlated with employee Intention to Turnover for higher education non-academic employees. More specifically, the researcher hypothesized that employees, who engaged with the supervisor in workplace decision-making, were empowered, and were treated with consideration, would be less likely to seek work elsewhere. Hypothesis A was supported by the study results. Cooperative Leader Behavior was negatively correlated with Intention to Turnover ($r = -.444$, $p<.05$). The path between Cooperative Leader Behavior and Intention to Turnover was significant ($\beta= -.436$, $p<.05$), indicating fewer intentions to turnover for higher levels of perceived Cooperative Leader Behavior. When middle managers interact with employees in participative and supportive ways, employees may tend to think less frequently about quitting their job and have greater propensities to remain with the current organization.

Hypothesis B: The Relationship between Cooperative Leader Behavior and Work Fulfillment and Identity Will Be Positive and Significantly Different from Zero

Huang et al. (2010) reported a moderate correlation between participative leadership behavior and psychological empowerment where empowerment included meaning and impact items ($r=.333$, $p<.001$ for managerial subordinates; $r=.44$; $p<.001$ for non-managerial subordinates). Support was demonstrated in several other studies, including 2 meta-analyses, for a positive relationship between participative and supportive leadership with overall job satisfaction, for which growth satisfaction was one component (Fisher & Edwards, 1988; Kim, 2002; Wofford & Liska, 1993).

Hypothesis B was formulated for investigating that Cooperative Leader Behavior would have a significant, positive correlation with Work Fulfillment and Identity (representing an employee's sense of growing and developing in the job and being able to express their full potential). This hypothesis was supported by the data. The path coefficient between Cooperative Leader Behavior and Work Fulfillment and Identity was positive and significant ($\beta=.517$, $p<.05$). A strong positive correlation between Cooperative Leader Behavior and Work Fulfillment and Identity was confirmed ($r=.440$, $p<.05$). The coefficient of determination for Work Fulfillment and Identity was .267, indicating that leadership explained approximately 27% of the variance in an employee's perception of work fulfillment and identity. These results lead the researcher to suggest that employees who engage cooperatively with their middle managers are more likely to perceive that they are learning, developing, growing and expressing their potential in the workplace.

Hypothesis C: The Relationship between Cooperative Leader Behavior and Work Influence and Affiliation Will Be Positive and Significantly Different from Zero

Hypothesis C was formulated for investigating the presence of a significant, positive correlation between Cooperative Leader Behavior and Work Influence and Affiliation. This hypothesis was established based on the research of Huang et al. (2010), Meierhans et al. (2008), Wofford and Liska (1993), and Mathieu and Zajac (1990) who found positive relationships between participative and supportive leadership with organizational commitment (affiliation commitment being one component) and psychological empowerment (where empowerment included meaning and impact items). Hypothesis C was supported by the results. The correlation between Cooperative Leader

Behavior and Work Influence and Affiliation was positive and high according to Cohen's (1988) guidelines for judging the strength of Pearson zero-order correlation coefficients ($r=.580$, $p<.05$). The path between Cooperative Leader Behavior and Work Influence and Affiliation was significant ($\beta=.643$, $p<.05$). Cooperative Leadership explained approximately 41% of the variance in an employee's perception of work influence and affiliation, indicated by the coefficient of determination for work influence and affiliation ($R^2=.414$). These results lead the researcher to suggest that when employees perceive cooperative interactions with their middle manager, they are more likely to feel a sense of belonging with their co-workers and that their actions are making a difference in the workplace/community/society/world.

Hypothesis D: The Relationship between Work Fulfillment and Identity Behaviors and Learning Goal Orientation Will Be Positive and Significantly Different from Zero

Work Fulfillment and Identity was hypothesized to significantly and positively relate to the selected performance driver Learning Goal Orientation. In other words, it was hypothesized that employees who feel a close connection to their work role and are fulfilled in the workplace will be more likely to look at work challenges as opportunities for growth (i.e. be learning goal oriented). Payne et al. (2007), in their meta-analysis, demonstrated a positive correlation between the need for achievement and general self-efficacy. Work Fulfillment and Identity bears some resemblance to achievement in the workplace, while Learning Goal Orientation incorporates some aspects of general self-efficacy. The hypothesized path was supported by the data. The path between Work

Fulfillment and Identity and Learning Goal Orientation was significant (β=.261, p<.05). The correlation coefficient between the two constructs was positive, but low (r=.280, p<.05; Cohen, 1988). Although, Work Fulfillment and Identity was positively related to Learning Goal Orientation; the coefficient of determination for Learning Goal Orientation was small (R^2=.068), indicating that other factors need to be considered when explaining the variance in an employee's learning goal orientation.

Hypothesis E: The Relationship between Work Fulfillment and Identity and Employee Intention to Turnover Will Be Negative and Significantly Different from Zero

Work Fulfillment and Identity was hypothesized to be significantly and negatively related to employee Intention to Turnover. Bretz and Judge (1994) found a positive correlation between P-J Fit and job satisfaction (inversely related to turnover), while Steers and Mowday (1981) also suggested a tie between work fulfillment and turnover. A meta-analytic review by Seibert et al. (2011) found psychological empowerment to be negatively correlated to Intention to Turnover. The results of the current study were in agreement with prior literature; Hypothesis E was supported by the study data. The correlation between Work Fulfillment and Identity and Intention to Turnover was negative and significantly different from zero (r=-.617, p<.05). The hypothesized path was also statistically significant (β=.480; p<.05). These results lead the researcher to suggest that (holding all other variables constant) employees who perceive themselves to be fulfilled, engaged in important work, and expressing their potential in the workplace are less likely to consider leaving their position.

Hypothesis F: The Relationship between Work Fulfillment and Identity and Personal Industry Will Be Positive and Significantly Different from Zero

Podsakoff et al. (2000) summarized over a decade of literature on organizational citizenship behaviors, identifying various forms of OCB as well as the antecedents and outcomes of OCB. Meta-analytic correlation identified by Podsakoff et al. between employee satisfaction and conscientiousness/personal industry OCB behavior led to the establishment of Hypothesis F. Work Fulfillment and Identity was hypothesized to be significantly and positively related to Personal Industry. It was hypothesized that employees, who felt both a close connection to their work role and fulfilled (a form of satisfaction) in the workplace, would be more inclined to go above and beyond minimal job expectations when performing their work. The correlation coefficient between Work Fulfillment and Identity and Personal industry was moderate (Cohen, 1988) and significantly different from zero ($r=.302$; $p<.05$). The hypothesized path was positive and significant ($\beta=.309$; $p<.05$). Work Fulfillment and Identity explained approximately 10% of the variance in Personal Industry ($R^2=.102$).

Hypothesis G: The Relationship between Work Influence and Affiliation and Employee Intention to Turnover Will Be Negative and Significantly Different from Zero

As mentioned previously, a meta-analytic review by Seibert et al. (2011) found psychological empowerment (which includes meaning and impact items) to be negatively correlated to Intention to Turnover, while another meta-analytic study (Meyer et al., 2002) confirmed a negative correlation between affective commitment and

Intention to Turnover. Sablynski et al. (2002) supported the researcher's logic that satisfaction is negatively correlated with Intention to Turnover. To add to the literature, Hypothesis G was formulated for investigating that Work Influence and Affiliation (sense of impact, serving a larger cause, and affiliation in the workplace) would be significantly and negatively correlated with Intention to Turnover. In other words, it was proposed that employees who perceive they have influence in the workplace and feel close to their work colleagues would be less likely to turnover. Hypothesis G was supported by the study data. The correlation coefficient between Work Influence and Affiliation and Intention to Turnover was high (Cohen, 1988) and significantly different from zero ($r=-.575$; $p<.05$).The hypothesized path was statistically significant ($\beta= -.293$, $p<.05$). Of three constructs which predicted Intention to Turnover, Work Influence and Affiliation was the weakest predictor, while Work Fulfillment and Identity served as the strongest predictor of employee Intention to Turnover.

Hypothesis H: The Relationship between Work Influence and Affiliation and Personal Industry Will Be Positive and Significantly Different from Zero

The path between Work Influence and Affiliation and Personal Industry was expected to be positive and significant based on prior research. Organ and Ryan (1995), in a meta-analytic study, found that affective organizational commitment was a predictor of normative organizational citizenship behaviors (to which Personal Industry relates). Meierhans et al. (2008) found that affective organizational commitment served as a mediator between supportive leadership and OCB. In continuance with the literature, it was hypothesized that employees who perceived they held influence in the workplace,

were serving a larger cause, and felt close to their work colleagues would be more likely to go above and beyond minimal job duties with respect to absenteeism, meeting deadlines, accuracy, and attention. Surprisingly, Hypothesis H was not supported by the study data. Although the correlation coefficient between Work Influence and Affiliation and Personal Industry was significantly different from zero, it was low ($r=.256$; $p<.05$; Cohen, 1988).Furthermore, the path between Work Influence and Affiliation and Personal Industry was not significant ($\beta=.012$, $p<.05$). One potential reason is that Work Influence and Affiliation is dissimilar to the affective organizational commitment constructs reported in the literature. Another possibility is that the higher education context in which the data were gathered results in differing effects. In essence, it may be that non-academic higher education employees, in particular, are not motivated to exhibit Personal Industry behaviors as a result of higher levels of perceived Work Influence and Affiliation.

Hypothesis I: The Relationship between Work Influence and Affiliation and Interpersonal Helping Will Be Positive and Significantly Different from Zero

The path between Work Influence and Affiliation and Interpersonal Helping was expected to be positive and significant, again, based on the research that showed a positive correlation between affiliation commitment and OCB (Meierhans et al., 2008). Furthermore, Organ and Ryan (1995) demonstrated a relationship between affective organizational commitment and altruistic organizational citizenship behaviors (to which interpersonal helping relates). In other words, employees who perceived they held influence in the workplace and felt close to their work colleagues were expected to be

more likely to exhibit extra role behavior associated with helping their co-workers. Hypothesis I was supported in that the path between Work Influence and Affiliation and Interpersonal Helping was significant ($\beta = .274$, $p<.05$). The correlation coefficient between Work Influence and Affiliation and Interpersonal Helping was low (Cohen, 1988) and significantly different from zero ($r=.233$; $p<.05$). The researcher asserts that being part of a community suggests certain roles and responsibilities for the individual members to ensure the well-being the entire community, including orienting new members, contributing toward the solving of work-related problems, and being courteous and concerned for co-workers.

Non-Hypothesized Relationship between Work Influence and Affiliation with Work Fulfillment and Identity

The original structural model (with paths established based on Hypotheses A-I) did not yield satisfactory fit, thus modification indices (M.I.) were reviewed to attempt to adjust the model for improved fit. The highest M.I. had a value of 664.271, indicating that a reciprocal path be added between the two constructs, Work Influence and Affiliation with Work Fulfillment and Identity. Given the high correlation coefficient between the two constructs ($r=.757$, $p<.05$), and EFA results where one item cross-loaded on both of these constructs, this path was added.

The path coefficient between the two constructs was significant ($\beta=.848$, $p<.05$), indicating a high degree of intercorrelation between Work Influence and Affiliation and Work Fulfillment and Identity. The results of the exploratory factor analysis were considered as one plausible explanation for this relationship. In the EFA, the item

Empowerment-Impact 1 (Emp1I) loaded on both Work Influence and Affiliation (.556) and Work Fulfillment and Identity (.477). Given the theoretical underpinnings that suggest these constructs work together to comprise an employee's perceptions of meaningful work, the interrelationship is not surprising. Kline (2011) indicated that models with direct feedback loops (where Work Influence and Affiliation and Work Fulfillment and Identity are both causes and effects of each other) are called nonrecursive models. In this type of model, the endogenous mutual causation constructs are assumed to share at least one common, omitted cause.

Conclusions

Conclusions Regarding the Study Constructs

Based on the findings of this research, several conclusions may be drawn. First, the constructs represented in the literature as Growth Satisfaction, Empowerment, Person-Job Fit, and Affiliation Commitment do not operate as separate constructs when used together in an instrument with a population such as that used in this study. Although, prior researchers (Hackman & Oldham, 1974; Kacmar et al., 1999; Spreitzer, 1995; Xie, 1996) established the validity of the individual constructs, they did not do so with an instrument that included all four constructs. The researcher is not aware of previously reported studies where these constructs have been combined into a single instrument, nor any studies where combinations of the constructs have been studied together in a higher education context. Exploratory factor analysis clearly indicated the presence of two constructs (named Work Fulfillment and Identity and Work Influence and Affiliation) from the items which initially represented four constructs.

Work Fulfillment and Identity and Work Influence and Affiliation, although descriptively similar to the Lips-Wiersma and Morris (2009) conceptualization of meaningful work, were not represented as four distinct constructs, as in the Lips-Wiersma and Morris model. Rather, the data supported and underlying two-factor structure. Chalofsky (2003) proposed an alternative model of meaningful work, comprised of three factors: a sense of self, the work itself, and a sense of balance. While Work Fulfillment and Identity bore some resemblance to the concept *a sense of self*, and Work Influence and Affiliation was descriptively associated with the concept *the work itself*, the two constructs identified in this study were unique from Chalofsky's (2003) model of meaningful work.

Another conclusion that can be drawn from this study is that the Path-Goal leader behaviors, participative and supportive leadership, operate as a single construct (Cooperative Leader Behavior) for the sample data. Although Indvik (1985, 1988) established the separateness of the constructs using a sample of non-academic employees, this did not hold true for this study. Other researchers have utilized Indivik's Path Goal Leadership Questionnaire (PLGQ) with other populations (e.g., Djibo et al., 2010), yet no evidence was found for cross-validation through exploratory factor analysis. Ayman (2004) suggested a rationale for a relationship between the two constructs, proffering that both are more considerate (vs. task-oriented) in nature. Logically, one could deduce that middle managers who care about the personal well-being and workplace satisfaction of their employees, will put forth additional effort to involve them in decision making, encourage their development and growth, and provide

them with work opportunities that exercise their strengths and enable the employee to have an impact.

Conclusions Regarding Relationships Between and Among Study Constructs

The Covariance of Work Fulfillment and Identity with Work Influence and Affiliation

The researcher found, through this study, that Work Fulfillment and Identity and Work Influence and Affiliation are highly intercorrelated. The path coefficient was high and significant (β=.848, $p<.05$). Given the theoretical underpinnings (particularly, Lips-Wiersma & Morris, 2009) that suggested an employee's perception of 1) developing and becoming self (fulfillment), 2) expressing their full potential (identity), 3) serving others (influence) and, 4) being in community (unity) with others work together to comprise an employee's overall sense of meaningful work, the interrelationship is not surprising. The cross loading of Empowerment-Impact 1 (EmpI1) on both Work Influence and Affiliation (.556) and Work Fulfillment and Identity (.477) provide another plausible explanation.

Although this study did not consider work-life balance as comprising one aspect of an employee's perception of meaningful work, it was conceptualized as such in some models of meaningful work (Chalofsky, 2003; Lips-Wiersma & Wright, 2012). It may be useful in future studies to include this as a third construct and to model Work Fulfillment and Identity, Work Influence and Affiliation, and Work-Life Balance as first-order latent constructs and indicators of a higher order construct of Meaningful Work.

Cooperative Leader Behavior Predicts Employee Perceptions of Work Fulfillment and Identity and Work Influence and Affiliation

Employees who perceive middle managers as cooperative leaders generally have higher perceptions of their own Work Fulfillment and Identity and Work Influence and Affiliation. The path coefficients between Cooperative Leader Behavior and Work Fulfillment and Identity (β=.517, $p<.05$) and Work Influence and Affiliation (β=.643, $p<.05$) were significant and high. Furthermore, the coefficient of determination (R^2) for Work Fulfillment and Identity was .267 and .414 for Work Influence and Affiliation, indicating that leadership explained approximately 27% of the variance in an employee's perception of Work Fulfillment and Identity and 41% of the variance in an employee's perception of Work Influence and Affiliation in this study.

These results support the research of Mathieu and Zajac (1990) who reported a positive relationship between participative management and organization commitment, as well as the work of Kim (2002) who identified a positive relationship between participative leadership and job satisfaction and Huang et al. (2010) who reported that empowerment is a mediator between participative leadership and work performance. Further, the present research adds to meta-analytic literature (Fisher & Edwards, 1998; Wofford & Liska, 1993) of supportive leadership's positive relationship to overall job satisfaction.

This work also supports path-goal leadership theory (House, 1971) that managers, by adapting their behaviors to meet employee needs, can enhance employee motivation to achieve workplace goals – by helping employees understand the larger

purpose of their work, drawing them in to a workplace community, offering opportunities to develop, grow, and use their skills and strengths to have an impact. Managers, through the employment of cooperative leadership, can also make paths to goal achievement more pleasant and less fraught with obstacles. It can be concluded, therefore, that employees' perceptions of the workplace as meaningful are positively related to their perceptions of their middle manager engaging in cooperative leadership practices.

Cooperative Leader Behavior and Employee Perceptions of Meaningful Work Predict Intention to Turnover

As a result of this study, it was found that Cooperative Leader Behavior, Work Fulfillment and Identity, and Work Influence and Affiliation influence employee intention to remain or leave the workplace. Overall, the three constructs that predicted Intention to Turnover (Cooperative Leader Behavior, Work Fulfillment and Identity, and Work Influence and Affiliation) explained approximately 57% of the variance in Intention to Turnover. Standardized path coefficients for the three paths ranged from -.293 to -.480.

The present research adds to the work of researchers in higher education who have identified poor perceptions of the work environment to influence intentions to turnover (Evans, 1988; Hancock, 1988; Holmes, Vierrier, & Chisholm, 1983; Lorden, 1998). This research supports the research of Smerek and Peterson (2007) who found that effective supervisors, as well as the work itself, predict non-academic, public research university employees' job satisfaction, which has a strong inverse relationship

with intention to turnover (Sablynski et al. 2002). It extends the work of Volkwein and Zhou (2003), who found that intrinsic and interpersonal satisfaction are predictors of overall satisfaction for university administrators, to non-managerial employees. Furthermore, intrinsic and interpersonal satisfaction are, by association with the constructs represented in this study as Work Fulfillment and Identity and Work Influence and Affiliation, identified as predictors of intention to turnover. The researcher, through the findings of this study, answers Volkwein and Zhou's (2003) charge to move beyond studies describing and assessing satisfaction levels, and make connections to performance and performance drivers. From the study findings, it can be concluded that leadership and an employee's perception of meaningful work are related to an employee's decision to remain or leave employment.

Work Fulfillment and Identity Predicts Learning Goal Orientation

The researcher, via the study data, determined that employees who perceive higher levels of Work Fulfillment and Identity also report higher levels of Learning Goal Orientation (LGO), though results suggest other variables influence this relationship. The path between Work Fulfillment and Identity and Learning Goal Orientation was significant (β=.261). The coefficient of determination for Learning Goal Orientation was low (R^2=.068), indicating that Work Fulfillment and Identity has some, but not primary explanatory factor in predicting Learning Goal Orientation. The researcher concludes, therefore, that other factors (not examined in this study) need to be considered when explaining the variance in an employee's self-reported willingness to challenge

him/herself by taking on assignments that can lead to growth and development, but also hold the risk of failure.

There is evidence to support goal orientation (Learning Goal and Performance Goal Orientations) as being both trait and situationally driven (Vandewalle & Cummings, 1997). Trait driven LGO, for example, is influenced by an employee's perceptions of his/her intellectual ability as something that can be enhanced through effort (Dweck & Leggett, 1988). Via the situational perspective, LGO is influenced by situational cues such as the need for achievement (Payne et al, 2007). In fact, Payne et al.'s meta-analysis (2007) indicated that effect sizes were small for implicit theories of intelligence (a trait theory) serving as a primary antecedent to goal orientation, while there was a strong, positive relationship between the need for achievement and LGO, supporting a situational perspective. The data found in the present study lend additional support for the situational perspective. Work Fulfillment and Identity, a situational cue, is significantly and positively correlated with LGO, yet it lacks primary explanatory influence.

Learning Goal Orientation was hypothesized in this study to be influenced by Work Fulfillment and Identity, since employee's who perceived themselves to be learning, growing and developing in the workplace, and who felt their knowledge, skills, and abilities were good matches with the position, were also thought to be more likely to accept challenging work. It could be, in constrast, that Work Influence and Affiliation is a better predictor of Learning Goal Orientation. As employees become active members of their work community, they may feel safer taking on assignments that might show

their weaknesses. Likewise, if they are connected to a larger cause of serving their community/society/the world, they may be more willing to take on risks associated with "stretch" assignments. It may be prudent to explore this relationship in future studies.

Work Fulfillment and Identity Predicts Personal Industry

Additionally, as a result of the study findings, the researcher concludes that employees who report high levels of Work Fulfillment and Identity are more likely to be industrious in the workplace, above and beyond what may be outlined in the job requirements. This is not true, however, for workers who report high levels of Work Influence and Affiliation. Although Work Fulfillment and Identity was significantly related to personal industry (β=.309, $p<.05$), Work Influence and Affiliation was not (β=.012, ns).

As a result of the significant relationship between Work Fulfillment and Identity and Personal Industry, the researcher contributes to the literature on organizational citizenship behavior, offering an additional antecedent (Work Fulfillment and Identity) to influence higher levels of OCB – at least for the dimension of personal industry. Podsakoff et al. (2000) confirmed the presence of a positive association with satisfaction and personal industry behaviors, which prompted the development of the study hypothesis. The results of this study extend previous research through examination of a construct likely to contribute to satisfaction – Work Fulfillment and Identity. Work Fulfillment and Identity explained approximately 10% of the variance in Personal Industry. As noted earlier for Learning Goal Orientation, Work Fulfillment and Identity explains only a small portion of the variance in Personal Industry; regardless, it offers

valuable information regarding factors that influence individual-level performance drivers.

In any study, it is important to recognize unsupported hypotheses as well as those which were supported, for these can provide just as much (and perhaps sometimes more) insight into the influences and relationships associated with the study constructs. The results of this research conflict with the research of Organ and Ryan (1995), who found that employee's perceptions of community (affective organizational commitment) positively relate to self-reported normative organizational citizenship behaviors like personal industry. Although one would surmise that employees who feel a sense of belonging and accept their role in the workplace community would exhibit the more conscientious behaviors of demonstrating responsibility, getting work done on time, and using time efficiently, surprisingly, study findings did not support this supposition. There was only a weak relationship between the two constructs, which did not meet the minimum level of significance ($p<.05$). At this time, the researcher cannot offer a logical explanation to make sense of this finding, except to suggest that, as a result of the covariance between Work Fulfillment and Identity and Work Influence and Affiliation, Work Influence and Affiliation serving as a stronger predictor of Personal Industry, may cause the explained variance to be steered through the stronger predictor.

Work Influence and Affiliation Predicts Interpersonal Helping

Finally, employees who reported high levels of Work Influence and Affiliation also indicated that they were more likely to be altruistic in the workplace, exhibiting interpersonal helping behaviors toward co-workers. Work Influence and Affiliation was

significantly related to Interpersonal Helping (β=.274, $p<.05$) although it explained only a small percentage of the variance in Interpersonal Helping (7.5%). This research contributes to the literature on employee perceptions of community/affiliation being positively correlated with Organizational Citizenship Behavior, particularly Interpersonal Helping (Meierhans et al., 2008; Meyer et al., 2002). It can be concluded, therefore, that non-academic higher education employees are more likely to go above and beyond job expectations, with respect to helping co-workers, when they perceive higher levels of influence and affiliation in the workplace. As noted previously, being a part of the community comes with inherent roles and responsibilities. Communities are places where supporting and helping go hand-in-hand with receiving support and help. The results of this research appear to align with, and may benefit from further linkages to, sociological theories of community and altruism.

Limitations and Strengths

Limitations

There were several limitations of this study, including the use of a cross-sectional, self-report survey design, which can result in common method variance, or overestimation, due to the single source of both the independent and dependent data (Podsakoff et al., 2003). However, this study necessitated use of this design due to the large size of the population, access restrictions to the population, time limits, and the number of constructs involved.

Also, time restrictions prevented the use of a reasonable pilot study to measure the adequacy of the instrument for the population under study. Although the researcher

carefully selected constructs that had reasonable levels of reliability and validity, results for this sample necessitated re-validation, and subsequently, re-specification of the hypotheses. A good pilot would have enabled improvement of the instrument (e.g., dropping poor/bad items from the constructs) prior to data collection.

Finally, the sample for this study was limited to a southwestern public institution of higher education in the U.S. Respondents were largely White, professional/non-faculty, working in academic affairs and administration. There was an underrepresentation in the sample of the service/maintenance employees. These employees largely had less than high school or high school/GED educational backgrounds, worked in the administration employing unit/division, and were traditionally underrepresented minorities. Generalizability, thus, is limited to populations with similar demographic characteristics to the study respondents.

Strengths

Despite limitations, this study has a number of strengths, including its high response rate. From the accessible population of 4, 235, responses were obtained from 1,333 employees (31.7%). Demographic groups (with respect to age, gender, ethnicity, education, job description, and employing unit) were, for the most part, well represented in the sample.

Most notably, another strength of this study was the use of structural equation modeling to test the relationships between non-academic leadership on employee work perceptions and selected performance drivers, which has not been previously reported in

the literature. SEM not only limits Type I error, but also enables the researcher to employ modification indices to alter a theorized model for improved fit.

Finally, the results of this study suggest a number of implications based on the identified relationships among Cooperative Leader Behavior and Work Influence and Affiliation and Work Fulfillment and Identity; for Cooperative Leader Behavior, Work Influence and Affiliation, and Work Fulfillment and Identity with Intention to Turnover; for Work Fulfillment and Identity with Learning Goal Orientation and Personal Industry; and, between Work Influence and Affiliation and Interpersonal Helping. These implications will be addressed next.

Implications and Recommendations

Human resource development (HRD) is both an academic discipline, as well as a field of practice (Swanson & Holton, 2001). HRD, from one perspective, aims at developing individuals and groups for the advancement of the individual, organizational processes, and the organization as a whole (Swanson & Holton, 2001). Practice cannot advance without sound research, and likewise, research is meaningless unless it is grounded in the true needs and context of the organization.

Furthermore, theory anchors and guides HRD research and practice. Theory "simply explains what a phenomenon is and how it works." (Toracco, 1997, p. 115) While HRD lacks a unifying theory, it draws on theories from multiple disciplines (Swanson & Holton, 2001). HRD core theories include systems theory, psychological theory, and economics theory, among others (Swanson & Holton, 2001).

Swanson and Holton (2001) argued that successful theory advances HRD practice and must be scholarly. Theory building can proceed from research-then-theory or from theory-to-research (Reynolds, 1971). The purpose of this research was not to engage in theory building, characterized as a cycle of generating, verifying and refining "descriptions, explanations and representations of observed or experienced phenomena." (Lynham, 2000, p. 161) The researcher does recognize, however, that this study has potential implications for theory.

This study was born out of the need to fill both organizational as well as research gaps. In so doing, the results of this study contribute toward the advancement of both research and practice, as well as to theory. In the following pages the implications and recommendations for theory, research, and practice are explored.

Implications and Recommendations for Theory

Leadership

Many theories of leadership exist and continue to be proliferated (Bass, 2008; Northouse, 2007). This research drew from the path-goal theory of leadership, which is used to argue that leader behavior should adapt to meet the motivational and tangible needs of followers in order to achieve work-related goals (House, 1971). Path-goal theory is generally considered to be a situational theory; varying situations place different demands on the leader and, therefore, require different leader behaviors be employed (Northouse, 2007). In this study, the researcher also considered leadership from a behavioral theory, placing emphasis on what leaders do and the resultant impact on employee perceptions and behaviors (Northouse, 2007).

From a path-goal perspective, this study had a unique approach. Instead of considering moderators that strengthen or weaken outcomes, the researcher simply looked at the direct effects of leader behaviors, which can be adjusted based on the situation presented, on employee motivational aspects. It also examined the indirect effects of leadership on performance drivers in the workplace. The results of this study led the researcher to suggest that leadership influences employee motivational factors like meaningful work (as a result of significant path coefficients linking Cooperative Leaders Behavior to Work Influence and Affiliation and Work Fulfillment and Identity).

Furthermore, the researcher drew the conclusion that Cooperative Leader Behavior has indirect effects on selected performance drivers in higher education (e.g., Learning Goal Orientation, Personal Industry, Interpersonal Helping, and Intention to Turnover) through the motivational aspects of meaningful work. As a result, this study contributes to path-goal leadership theory by supporting its underlying premise that leader behavior can influence higher levels of goal achievement by motivating employees and making the work itself more pleasurable (House, 1971).

From a situational perspective, exercising particular leader behaviors should be contingent on the characteristics of the work environment, as well as that of the followers (House, 1971). In this study, the researcher drew from study results that higher education non-academic employees respond to middle manager cooperative leader behaviors by perceiving higher levels of meaningful work. This, in turn, elicits learning goal oriented attitudes, higher levels of personal industry and interpersonal helping behaviors, and fewer intentions to turnover. Do cooperative leader behaviors uniformly

elicit perceptions of meaningful work; is meaningful work a universal motivator in the workplace; or, are these results specific to higher education non-academic employees? These answers should be examined through further research.

Meaningful Work

As of yet, there exists no theory known to the researcher of meaningful work; however, theory building may be a logical next step to advance the understanding of meaningful work. Dubin (1978) proposed a quantitative method for theory-building consisting of five stages: units, laws of interaction, boundaries, system states, and propositions. In the first stage, careful observation and descriptions of the phenomenon are needed. There is a growing body of literature that describes the phenomenon of meaningful work (Chalofsky & Krishna, 2009; Kahn, 1990; Lips-Wiersma & Morris, 2009). Units have been identified in Lips-Wiersma and Morris's (2009) model of meaningful work. In this study, the researcher quantitatively defined those units as constructs and analyzed them using a number of statistical tools (EFA, SEM, etc.). From a research-then-theory strategy of theory-building (Reynolds, 1971), the phenomenon of meaningful work was conceptually described in previous research (Lips-Wiersma & Morris, 2009) and, in this study, was quantitatively described in the form of constructs. These constructs were then measured in the higher education non-academic employment context. Further theory-building work would be required to examine the phenomenon in a variety of other situations, to look for patterns among the data that could help to define the laws of interaction, boundaries, system states, and establish propositions on meaningful work.

Performance

Individual, team, and organizational performance are key components of HRD, and performance improvement is a core underlying theory (Weinberger, 1998). Multiple theories of performance support HRD, including the unifying theory of performance improvement (Rummler & Brache, 1995), human performance technology (Gilbert, 1978; Stolovich & Keeps, 1992), and Swanson's (1995) theory of performance improvement, among others. Rummler and Brache (1995) proposed a unifying theory of performance improvement that includes three-levels: organizational, process, and job/individual. At the individual level, there exists a human performance system comprised of six components:

1. Performance specifications
2. Task support
3. Consequences
4. Feedback
5. Skills/knowledge
6. Individual capacity

The researcher argues that the results of this study contribute to the unifying theory of performance improvement, specifically individual level performance, by offering a rationale for the relationships between the units of the human performance system. The researcher suggests that cooperative leadership behavior supports an individual's capacity (both mentally and emotionally) for performance improvement. This is accomplished through cooperative leader behaviors, including

discussing/negotiating performance specifications, assessing the availability of resources to perform tasks – pledging support, providing feedback to the individual regarding their performance, and evaluating or enhancing an employee's knowledge and skill to perform job tasks. Engaging in these behaviors enhances employee mental and emotional capacity for performance through enhancement of an employee's sense of fulfillment, influence, identity, and affiliation (i.e., meaningful work). The results of this study provided quantitative evidence that Cooperative Leader Behavior was significantly and positively related to the two constructs representing meaningful work (Work Fulfillment and Identity and Work Influence and Affiliation), and that in turn, the meaningful work constructs were significantly related to the four performance drivers examined in this study (Learning Goal Orientation, Personal Industry, Interpersonal Helping, and Intention to Turnover).

Furthermore, Swanson's (1995) theory of performance improvement consists of five units (spanning individual, process, and organizational levels) that can be used by practitioners to diagnose performance gaps:

1. Mission/Goal
2. System Design/Environment
3. Motivation
4. Expertise
5. Capacity

From this perspective, the results of the present study support Swanson's theory at several levels. First, cooperative leader behaviors should be employed to achieve

organizational goals and to aid the realignment of employee goals with the organizational mission and goals. For example, the researcher's experience in international education led to the conclusion that many individuals embark on careers in International Student Services because of positive experiences engaging with other cultural groups. New International Student Advisors (ISAs) anticipate their job goals will substantially focus on making international students feel more welcome and more integrated into the home institution; however, this is often not the case. Realizing that much of their time will be spent enforcing university and federal regulations (some of which hinder forming close relationships with the students) can be discouraging and disorienting. Middle managers can assist the ISA to re-formulate, and thereby strengthen, their purpose for joining the field and find a renewed sense of meaning and fulfillment, as they grow to understand how the various aspects of the job ultimately support the well-being of the international student as well as the institution's ability to continue to host an international student program. Cooperative Leader Behavior allows the middle manager to engage in meaning making with employees.

On another level, Swanson's (1995) theory of performance improvement considers the motivation systems in place, motivational processes, and individual level motivations. Meaningful work, in this study, served as an employee motivator to support performance drivers in the higher education context. Cooperative Leader Behavior could be viewed as the process whereby meaningful work was perceived at the employee level. Finally, at the organizational level, systems are needed to promote the development of

middle manager expertise to use Cooperative Leader Behavior, assess employee perceptions of its use by middle managers, and monitor outcomes.

Implications and Recommendations for Research

The primary purpose of this study was to examine the relationships of perceived non-academic middle management leadership to employee perceptions of the workplace, and selected performance drivers in higher education. Prior to the initiation of this study, no reported data known to the researcher existed to explain these relationships, nor was there an instrument specifically designed to examine an employee's perception of meaningful work in alignment with conceptual theory.

The researcher, in conjunction with a thorough review of the literature, selected for use eight existing, validated instruments (representing nine constructs) that had face and content validity with the proposed concepts. Based on prior empirical research and logic, hypotheses were developed to explain the relationships between the constructs. Responses to the instrument were gathered online and analyzed using statistical methods, which resulted in revisions to the factor structure and the creation of a total of seven constructs, one which was used to explain leadership behavior, two which were used to explain an employee's perception of meaningful work, and four which represented performance drivers in higher education. Good model fit was obtained for the data with respect to both the measurement and structural models. This study, therefore, filled a gap in the literature.

In this study, the researcher identified three new constructs: Cooperative Leader Behavior, Work Fulfillment and Identity, and Work Influence and Affiliation. Further

research is needed to establish the validity of these constructs through replication, using them in different populations. The high correlation between Work Fulfillment and Identity and Work Influence and Affiliation might suggest the presence of a second-order factor, a general ability construct, which is measured through indicators in a first-order factor (Kline, 2011). The presence of a second-order factor could not be tested in this study, since it requires a minimum of three first-order factors (Kline, 2011); however, in future studies it may be useful to include work-life balance as an additional construct, based on literature which suggests it may be an important aspect of meaningful work (Chalofsky, 2003; Lips-Wiersa & Wright, 2012), and test a hypothesis that relates the three constructs as indicators of a higher order construct of meaningful work.

Since the conclusion of this study, Lips-Wiersma and Wright (2012) have published a study in which they validated the Comprehensive Meaningful Work Scale (CMWS). As these instruments were not developed prior to initiation of this research, they were not part of the instrument used for this study. Lips-Wiersma and Wright (2012) validated the scale with the use of subject matter experts, pilot testing, exploratory factor analysis, and SEM. The final scale consisted of 28 items and seven constructs (Unity with Others, Serving Others, Expressing Full Potential, Developing the inner Self, Reality, Inspiration, and Balancing Tensions between Doing/Being, and Self/Other). The scale was validated using a diverse (gender, employment, ethnicity) sample. Furthermore, confirmatory factor analysis (via SEM) supported a seven factor model, connected to a second-order factor (Meaningful Work). The constructs Unity

with Others, Serving Others, Expressing Full Potential, Developing the Inner Self included items that bore a close resemblance to the two constructs in the present study (Work Influence and Affiliation and Work Fulfillment and Identity); however, the constructs of Reality, Inspiration, and Balancing Tensions were unique. Future research to investigate the antecedents and outcomes of meaningful work using the CMWS scale, in comparison to the constructs identified in this study, could lend further insight into research on meaningful work.

Implications and Recommendations for Practice

Based on the results of this study, it may be concluded that higher education, non-academic middle manager Cooperative (i.e. participative and supportive) Leader Behaviors are related to employee perceptions of the workplace, and that these perceptions do (to some degree) relate to selected performance drivers, including Intention to Turnover, Personal Industry, Interpersonal Helping behaviors, and Learning Goal Orientation. Most significantly, the researcher demonstrated that cooperative leadership has a strong relationship to an employee's feelings of growing and developing, serving others, expressing their full potential, and being in unity with others (i.e., the constructs of Work Fulfillment and Identity and Work Influence and Affiliation). Furthermore, three constructs (Cooperative Leader Behavior, Work Fulfillment and Identity, and Work Influence and Affiliation) influence and predict employee Intention to Turnover. These results have several useful implications for practice.

First, the results provide support for non-academic, higher education middle managers to use participative and supportive leadership behaviors in their daily interactions with employees. As shown in this study and prior research, effective supervisors appear to be a predictor of reduced turnover and positive employee perceptions of the workplace in public institutions of higher education (Smerek & Peterson, 2007). Rationale for the relationship between supervisor behavior and turnover are provided via the lens of the path-goal theory of leadership. Cooperative Leader Behaviors clarify employee path to goal attainment and meet the motivational needs of employees by helping employees make sense of their workplace, the jobs that they perform, their impact and influence, and where they fit within the workplace (House 1971, 1996). Employees who have positive, cooperative relationships with their supervisor and experience meaningful work, in return, are more likely to persist with the organization.

Cooperative Leader Behavior is made up of both supportive and participative elements. With respect to support, middle managers need to spend time listening to, observing, understanding, and responding to employee work-related and personal interests and needs. For one, listening to employees share their interests and express their needs is one way for employees to perceive that the middle manager cares about them as an individual and their contribution/value in the workplace. For another, gaining an understanding of employee interests and needs (via observation and communication) enables the middle manager to respond in a considerate and helpful manner. By listening and through observation, the middle manager can, for example, determine if an

employee would benefit from special training, taking on a certain project, or time off to be with family.

A middle manager who invites employees to participate in the workplace acknowledges the value, skills, opinions, and contributions of the employee. Interaction provides an opportunity for the middle manager to shape employee perceptions of the workplace, by providing larger and/or clearer pictures, for example. Participative interactions also provide a space and opportunity to identify and address barriers to goal achievement. Cooperative leaders, using participative behaviors, provide frequent feedback (both positive and constructive) on job performance so that employees have some sense of what they are doing well and where they can improve.

Finally, middle managers who engage in participative leader behaviors empower employees. They facilitate opportunities for employees to learn, grow, and develop through training and development activities. They encourage employees to take on additional job responsibilities in order to exercise their knowledge and skills in ways that benefit the employee, as well as the workplace – in essence, to have opportunities to make a difference.

A second implication and recommendation for practice is that promoting the use of cooperative leadership in the workplace is one means for higher education institutions to improve the workplace climate (i.e., by fostering an open and welcoming environment through meaningful work). In the best fit path model, the constructs conceptualized to relate to an employee's perception of meaningful work (Work Fulfillment and Identity and Work Influence and Affiliation) were highly related. It is important, therefore, for

institutions and middle managers to focus on these simultaneously, and not in isolation. Cooperative Leader Behavior shows promise for being able to do so.

The workplace is more than what it produces; it is a place where humans learn, grow, develop, relate with each other, and improve in their performance. Human resource development has historically focused on both organizational and individual performance and development (Swanson & Holton, 2001). Meaningful work speaks to this human aspect of the workplace and the need to use humanistic principles as a foundation for structuring the workplace to achieve organizational goals. Fostering meaningful, healthy, positive work environments works in cooperation (not competition) with high performing organizations. Perceptions of meaningful work translate to workers who feel fulfilled, sense belonging with the organization, and feel that they are compatible with, growing in, and accomplishing something worthwhile in their jobs.

As a result, a third implication and recommendation for practice is that higher education institutions (as well as professional associations who offer leadership training programs for higher education managers) should gear training to develop cooperative leadership skills in middle managers. To be effectively adopted, training for middle managers needs to focus on knowledge, skills, and attitudes. Middle managers need to understand what behaviors constitute Cooperative Leader Behavior They need to engage in scenarios and share real-life examples where Cooperative Leader Behaviors can be and/or have been used.

Middle managers also need to understand why Cooperative Leader Behaviors are important and how/why they influence employee perceptions of meaningful work;

otherwise the skills they gain may not be used appropriately or regularly on the job. Skills training should help middle managers understand that participative and supportive leadership are not ends in themselves, but create a cooperative environment where work fulfillment and identity and work influence and affiliation thrive, thus influencing employee intention to turnover, their willingness to be industrious and help co-workers, and their learning goal orientation.

Fourth, human resource professionals in higher education should focus on assessment – assessing the practices of middle-management to ensure the utilization of Cooperative (participative and supportive) Leader Behaviors and assessment of employee perceptions of the workplace as meaningful. Cooperative Leader Behavior knowledge, skills, and attitudes must transfer effectively from the training environment to regular use in the workplace. Thus, institutions should develop systems to reinforce and assess effective use of cooperative leadership skills. Assessment could be used to identify gaps in both knowledge and application of Cooperative Leader Behavior; provide information on how to best gear training or guide training selection, as well as encourage widespread practice of these leader behaviors; and, aid institutions in better understanding successes and challenges with respect to fostering meaningful work for employees.

Finally, as a result of the study findings, institutions should promote the development and practice of non-academic middle manager participative and supportive leader behaviors, and the fostering of employee meaningful work perceptions, as a means to drive higher levels of performance in the workplace. The two constructs

representing employee perceptions of meaningful work were significantly related with performance drivers important in higher education: Intention to Turnover, Personal Industry, Interpersonal Helping and Learning Goal Orientation. In accordance with the path-goal theory of leadership (House, 1971, 1996), these leadership behaviors appear to provide sufficient motivation to encourage or to reduce barriers to enable goal attainment. Fostering favorable work environments (the work itself) serves as one means to motivate higher education employees to engage in challenging work and go above and beyond stated job expectations (Johnson, Heck, & Rosser, 2000). Further, results lead the researcher to support an interpretation that employee perceptions of meaningful work, along with the manager's cooperative leadership behaviors, can counter employee turnover (Smerek & Peterson, 2007). Employee turnover is costly, impacts morale, and influences productivity and effectiveness in the workplace (Angermeier et al., 2009; Smerek & Peterson, 2007).

Future Research

Future researchers should attempt to replicate the findings, examining other types of higher education institutions, including private and community colleges, and in other parts of the U.S. Institutions with different levels of focus on teaching, research, and service; or, with different political climates (e.g., union vs. non-union) may elicit varying results.

Future researchers may also wish to consider the use of multi-level modeling to explore differences between managerial and non-managerial employees. For example, Huang et al. (2010) examined whether participative leadership enhanced work

performance by eliciting employee empowerment or trust in supervisor, comparing non-managerial subordinates to managerial subordinates. The researchers found that empowerment was a stronger mediator of work performance for managerial subordinates, while trust in supervisor mediated the same relationship for non-managerial employees. Although the researcher, in this study, did not exclude supervisory employees who reported to middle managers (nor differentiate between supervisory and non-supervisory employees), researchers may wish to explore potential differences between the two groups.

Finally, based on the relatively low path coefficients for the outcome constructs (Learning Goal Orientation, Personal Industry, and Interpersonal Helping), researchers may want to explore other possible outcomes in future studies. Constructs worth exploring may include self-reported job satisfaction, customer service outcomes, performance indicators, etc. Researchers may also attempt to address, in future studies, common method variance concerns through collection of a second source of data such as annual performance ratings or actual turnover data.

Summary

This study led to the adaptation and confirmation of a model for how non-academic middle managers can support employee perceptions of meaningful work and selected performance drivers, through cooperative leadership. Non-academic middle managers, in this study, were hypothesized to play key roles in meeting the increased demands being placed on higher education. The importance of their influence was based on 1) their positionality between line employees and higher levels of administration, 2)

prior research, and 3) the ability to shape and guide leadership behaviors through training.

Institutions invest significant amounts of time and money to develop in-house leadership training and development programs for middle managers and/or to send them to leadership-focused workshops, conferences, and programs offered through professional associations and other organizations. Although numerous reasons for investing in the professional development of middle managers are likely to exist, certainly one reason to do so is to enhance managerial and leadership skill in order to improve institutional operations. The researcher offers empirical data linking university selected performance drivers with higher education middle manager behavior, and thus guiding decisions for program and institutional effectiveness.

Finally, workplaces are more than spaces to enable transactions of goods and services. The researcher found support in this study for the idea that meaning is inherent in the work with which employees are engaged. Meaningful work offers employees an opportunity to learn, grow, develop, express their identity and potential, be part of a community, and make a difference. This study provides key data to support the idea that middle managers who interact cooperatively (via participative and supportive behaviors) can influence and enhance employee perceptions of a meaningful workplace with high levels of performance at individual, group, process, and organizational levels.

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APPENDIX A

PILOT FEEDBACK FORM

Higher Education Non-Academic Middle Managers: The Relationships among Leadership Behaviors, Employee Perceptions of Meaningful Work, and Selected Performance Drivers

Thank you for volunteering your time to assist me in the development of this survey. I want to be sure that the instructions are clear and survey statements are easy to respond to before beginning my research study. Please review all study materials and respond to the following questions. Revisions will be made based on your suggestions.

Survey Start time: _____ Survey End time: _____

Recruitment Materials & Survey Instrument	Yes	No	Recommendations for Improvement
Is the survey understandable in relation to the study description?			
Were instructions for completing the survey clear? If not, suggest improvement.			
Is the meaning of each item clear and language appropriate for the target population? If any of the questions were confusing, please explain.			
Does each item appear to measure the intended construct as operationally defined? See attached, "Operational Definitions and Related Survey Questions"			
Was the overall survey layout and flow clear and easy to understand? If not, suggest improvement.			
Did you have any problems with the accessibility or functionality of the online survey? If so, please describe.			
Did you find the length of the survey to be appropriate?			
Did you find the amount of time to take the survey to be appropriate?			
If you have any other comments regarding the survey, please let me know.			

APPENDIX B

BOX PLOTS

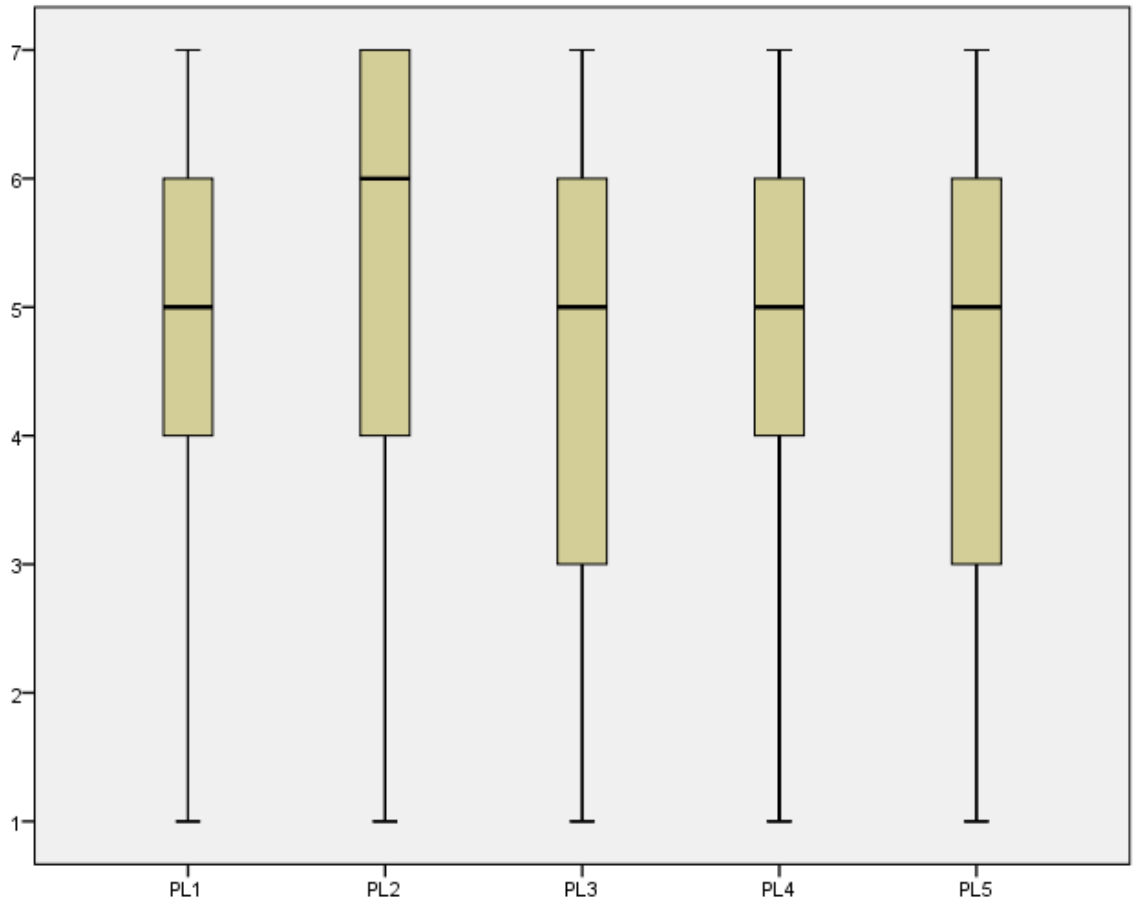
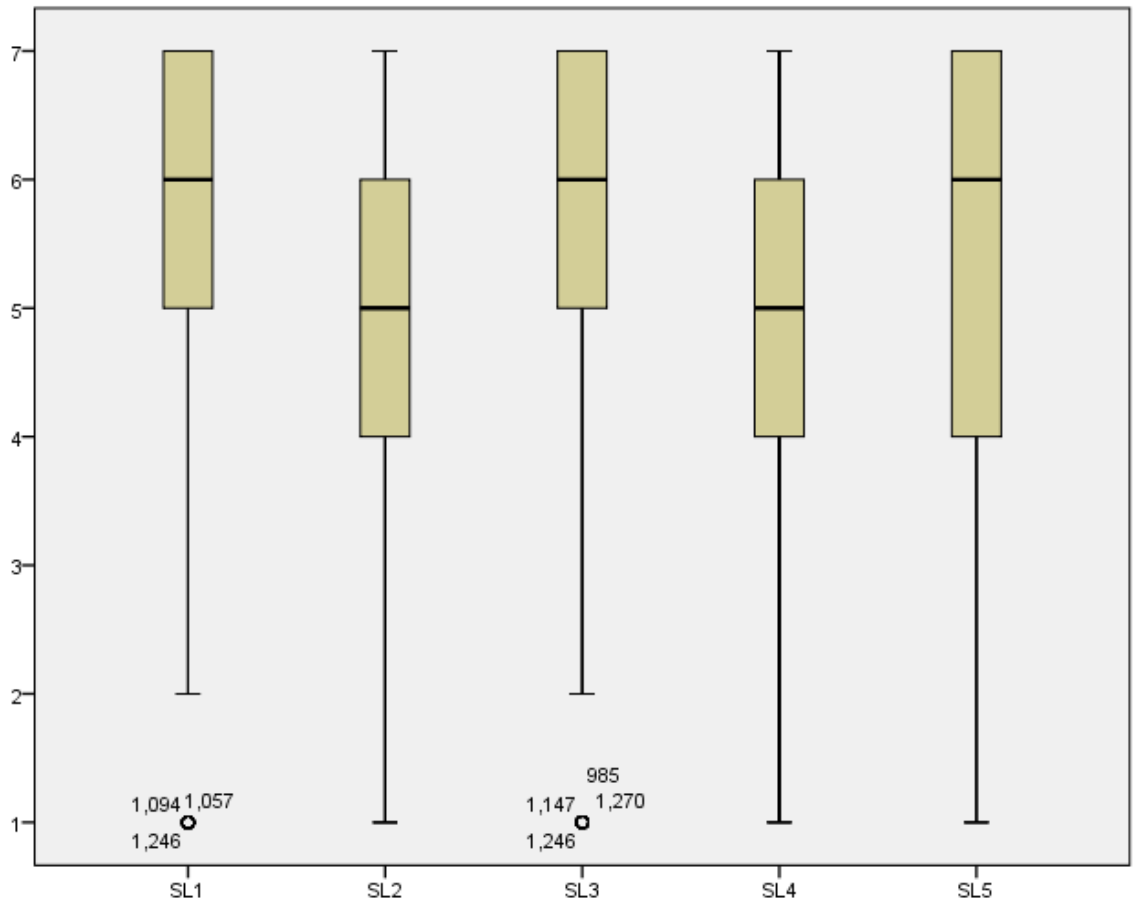
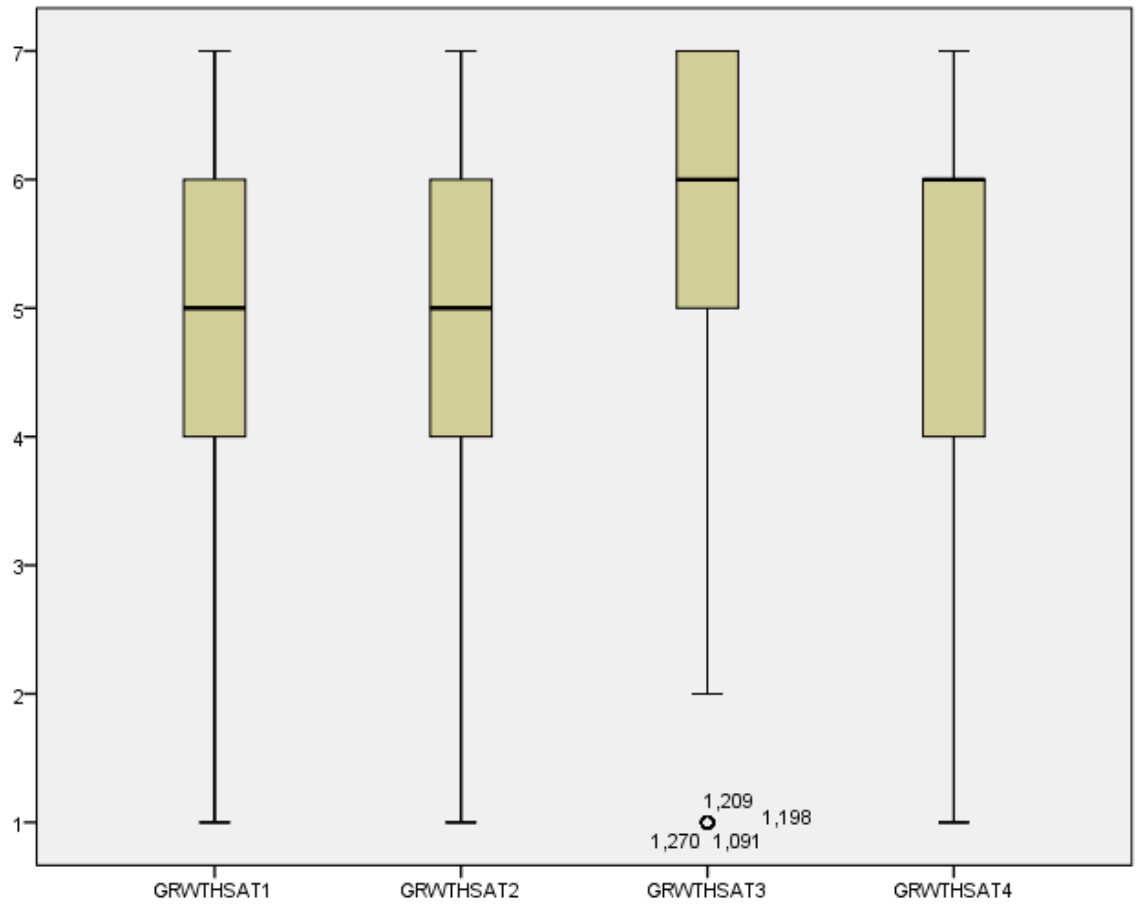


Figure B.1. Box plots for Participative Leadership items.



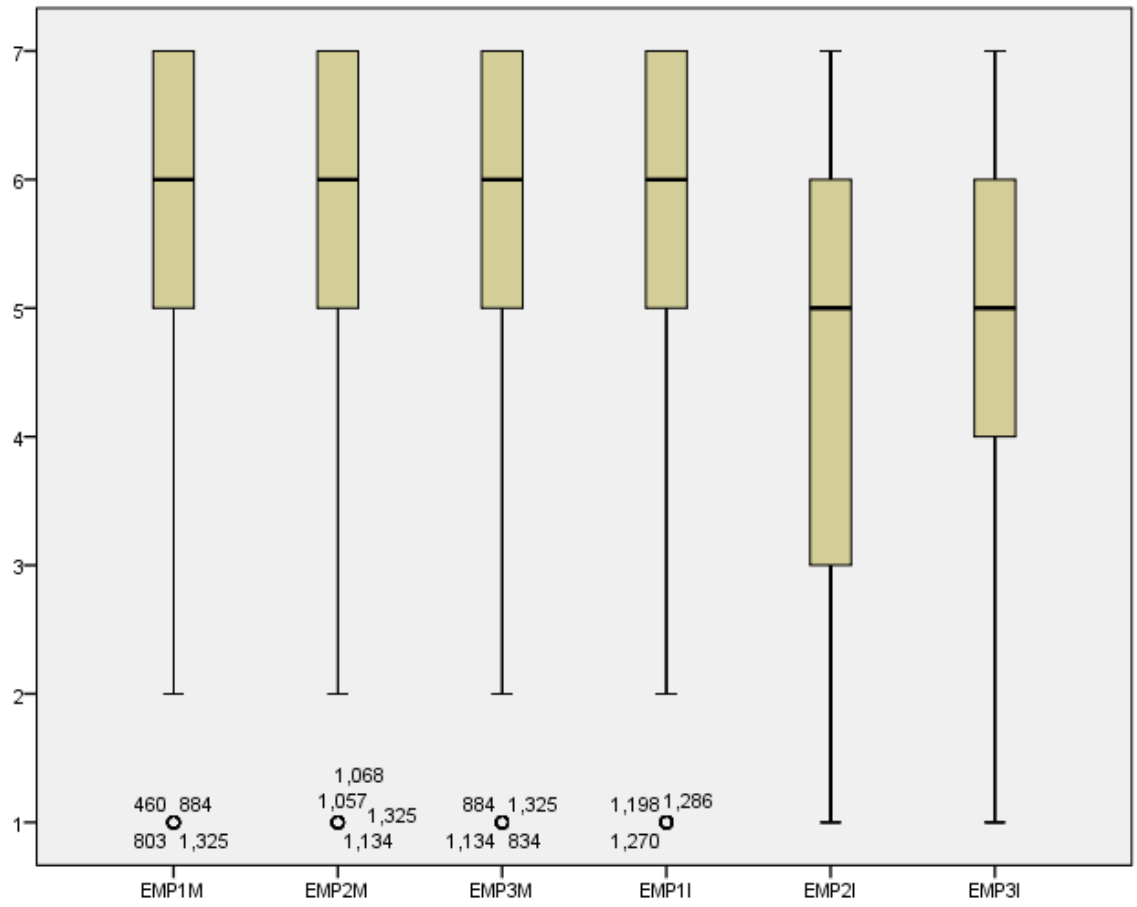
Note: Outliers represented small percent of total (1,333 cases).

Figure B.2. Box plots for Supportive Leadership items.



Note: Outliers represented small percent of total (1,333 cases).

Figure B.3. Box plots for Growth Satisfaction items.



Note: Outliers represented small percent of total (1,333 cases).

Figure B.4. Box plots for Empowerment (Meaning and Impact) items.

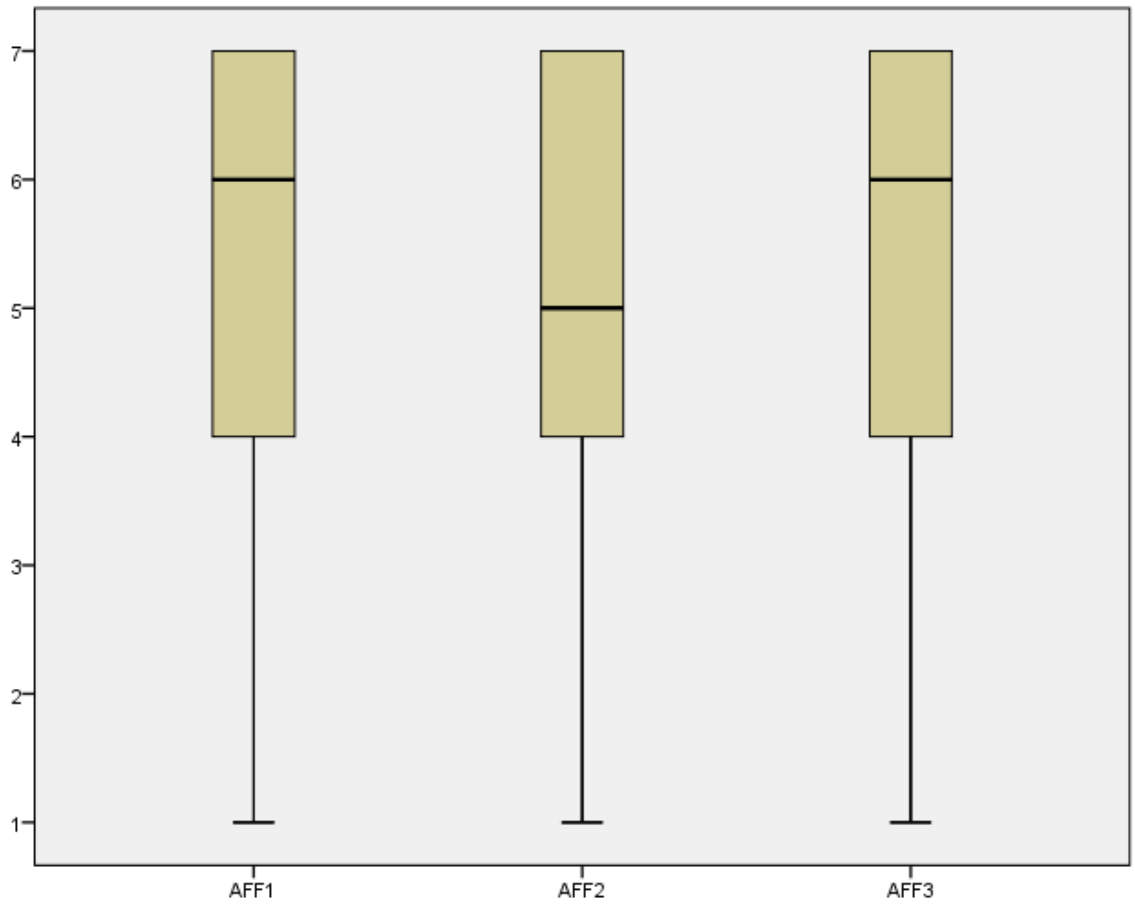
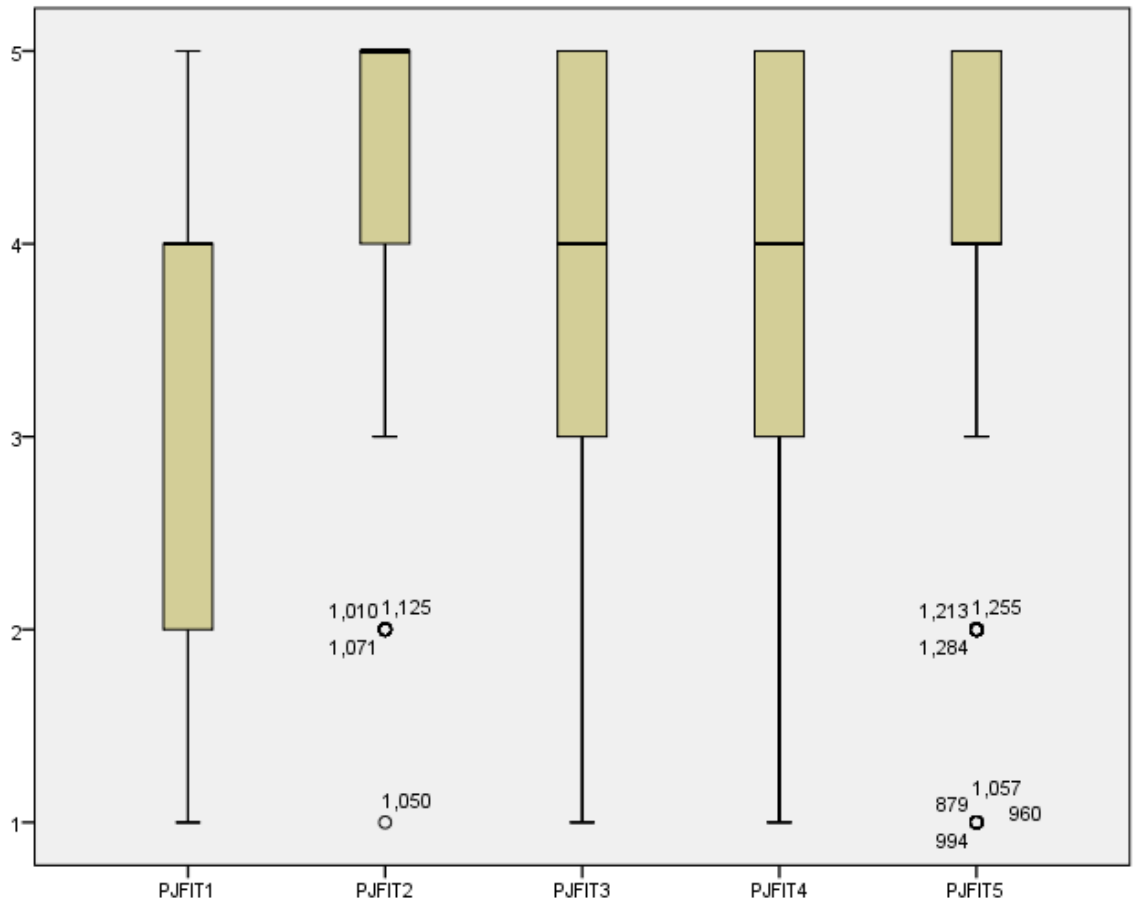
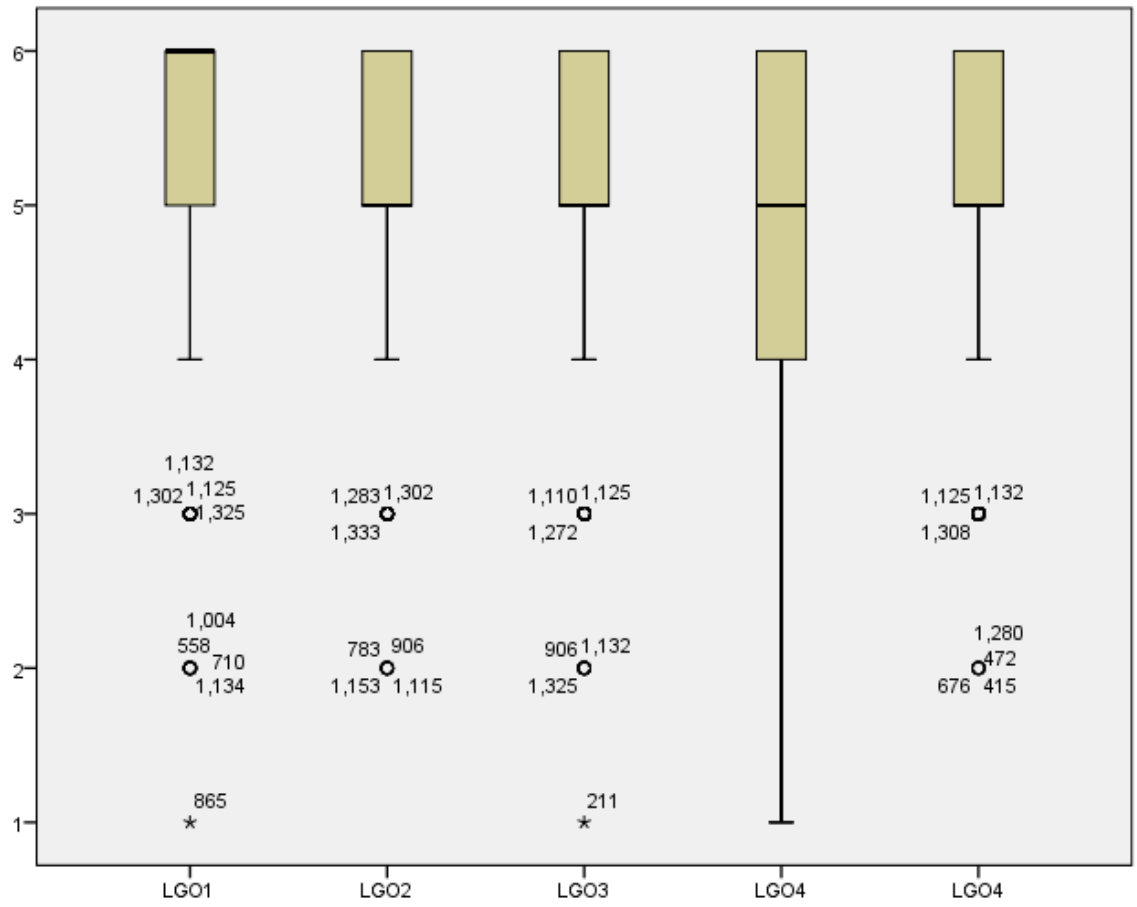


Figure B.5. Box plots for Affiliation Commitment items.



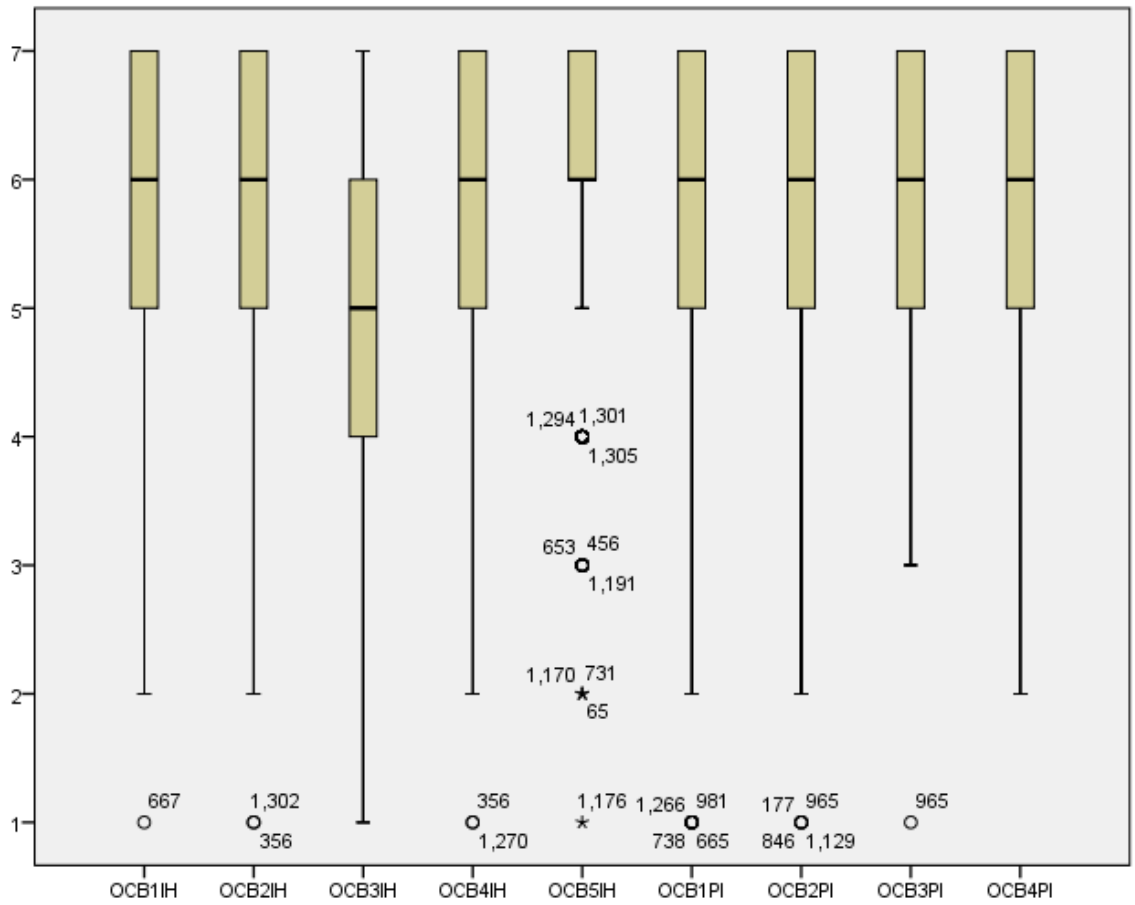
Note: Outliers represented small percent of total (1,333 cases).

Figure B.6. Box plots for Person-Job Fit items.



Note: Outliers represented small percent of total (1,333 cases).

Figure B.7. Box plots for Learning Goal Orientation items.



Note: Outliers represented small percent of total (1,333 cases).

Figure B.8. Box plots for Organizational Citizenship (Interpersonal Helping and Personal Industry) items.

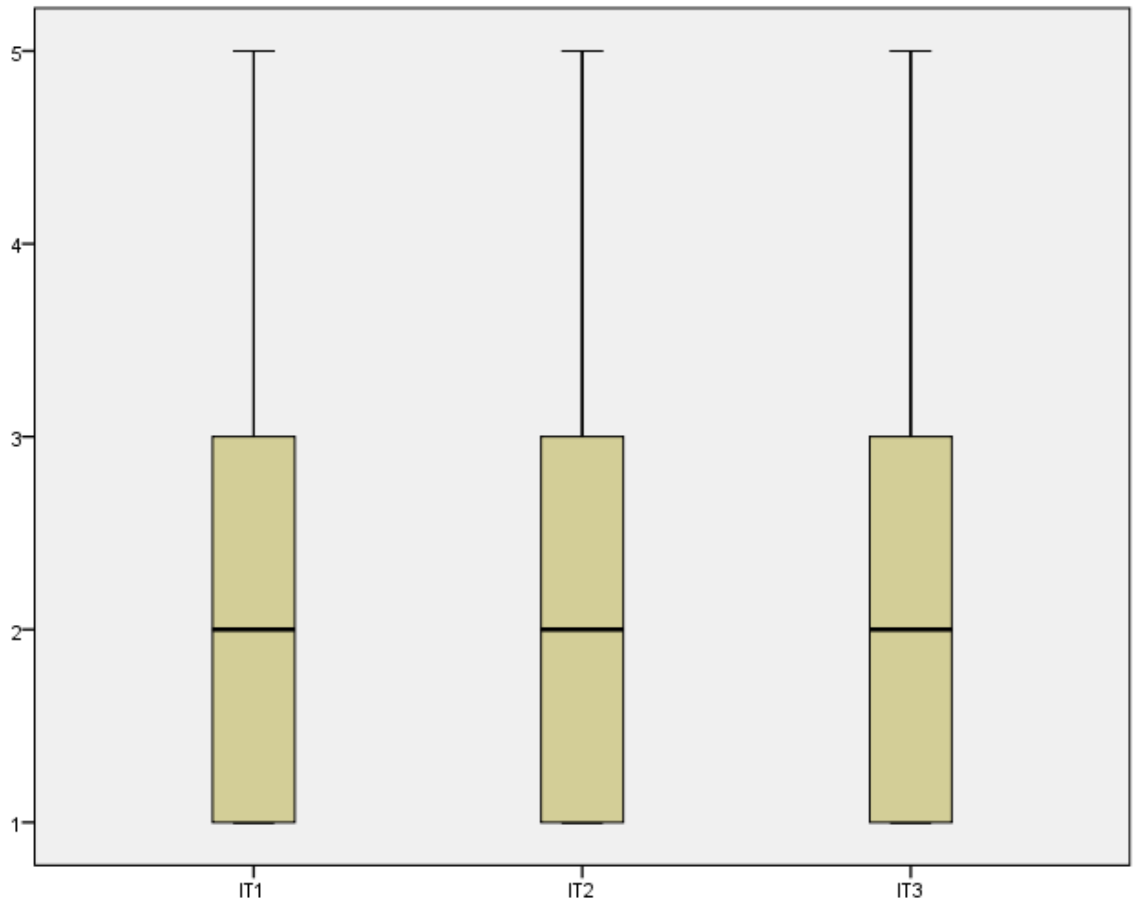


Figure B.9. Box plots for Intention to Turnover items.

APPENDIX C

INTER-ITEM CORRELATION MATRIX

		GRWTHSAT1	GRWTHSAT2	GRWTHSAT3	GRWTHSAT4	EMP1M	EMP2M	EMP3M	EMP1I	EMP2I	EMP3I
GRWTHSAT1	Pearson Correlation	1	.783**	.637**	.669**	.498**	.558**	.536**	.469**	.542**	.545**
GRWTHSAT2	Pearson Correlation	.783**	1	.664**	.670**	.551**	.606**	.600**	.493**	.576**	.583**
GRWTHSAT3	Pearson Correlation	.637**	.664**	1	.617**	.408**	.464**	.444**	.515**	.647**	.628**
GRWTHSAT4	Pearson Correlation	.669**	.670**	.617**	1	.524**	.589**	.571**	.470**	.531**	.535**
EMP1M	Pearson Correlation	.498**	.551**	.408**	.524**	1	.821**	.856**	.499**	.399**	.400**
EMP2M	Pearson Correlation	.558**	.606**	.464**	.589**	.821**	1	.905**	.537**	.482**	.484**
EMP3M	Pearson Correlation	.536**	.600**	.444**	.571**	.856**	.905**	1	.545**	.451**	.458**
EMP1I	Pearson Correlation	.469**	.493**	.515**	.470**	.499**	.537**	.545**	1	.631**	.641**
EMP2I	Pearson Correlation	.542**	.576**	.647**	.531**	.399**	.482**	.451**	.631**	1	.902**
EMP3I	Pearson Correlation	.545**	.583**	.628**	.535**	.400**	.484**	.458**	.641**	.902**	1
AFF1	Pearson Correlation	.617**	.664**	.619**	.552**	.455**	.511**	.499**	.548**	.667**	.682**
AFF2	Pearson Correlation	.606**	.629**	.592**	.501**	.421**	.482**	.459**	.494**	.610**	.608**

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

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

c. Listwise N=1313

Inter-Item Correlation Matrix, Continued.

		AFF1	AFF2	AFF3	PJFIT1	PJFIT2	PJFIT3	PJFIT4	PJFIT5
GRWTHSAT1	Pearson Correlation	.617**	.606**	.386**	.624**	.148**	.587**	.570**	.276**
GRWTHSAT2	Pearson Correlation	.664**	.629**	.375**	.618**	.213**	.615**	.620**	.377**
GRWTHSAT3	Pearson Correlation	.619**	.592**	.340**	.548**	.157**	.559**	.516**	.295**
GRWTHSAT4	Pearson Correlation	.552**	.501**	.263**	.640**	.069*	.588**	.596**	.215**
EMP1M	Pearson Correlation	.455**	.421**	.186**	.525**	.265**	.503**	.568**	.278**
EMP2M	Pearson Correlation	.511**	.482**	.219**	.583**	.222**	.584**	.604**	.281**
EMP3M	Pearson Correlation	.499**	.459**	.226**	.560**	.254**	.565**	.616**	.308**
EMP1I	Pearson Correlation	.548**	.494**	.228**	.484**	.200**	.461**	.482**	.281**
EMP2I	Pearson Correlation	.667**	.610**	.314**	.510**	.166**	.519**	.494**	.303**
EMP3I	Pearson Correlation	.682**	.608**	.303**	.517**	.163**	.508**	.484**	.300**
AFF1	Pearson Correlation	1	.891**	.515**	.590**	.182**	.566**	.545**	.349**
AFF2	Pearson Correlation	.891**	1	.547**	.553**	.164**	.538**	.504**	.318**

Inter-Item Correlation Matrix, Continued.

		LGO1	LGO2	LGO3	LGO4	LGO5	IT1	IT2	IT3
GRWTHSAT1	Pearson Correlation	.186**	.189**	.160**	.144**	.148**	-.556**	-.453**	-.384**
GRWTHSAT2	Pearson Correlation	.199**	.190**	.189**	.174**	.165**	-.581**	-.486**	-.402**
GRWTHSAT3	Pearson Correlation	.189**	.202**	.181**	.191**	.185**	-.461**	-.395**	-.370**
GRWTHSAT4	Pearson Correlation	.152**	.175**	.137**	.136**	.132**	-.461**	-.433**	-.404**
EMP1M	Pearson Correlation	.297**	.285**	.293**	.236**	.215**	-.408**	-.320**	-.333**
EMP2M	Pearson Correlation	.270**	.279**	.279**	.233**	.221**	-.467**	-.368**	-.368**
EMP3M	Pearson Correlation	.310**	.291**	.299**	.244**	.231**	-.461**	-.358**	-.364**
EMP1I	Pearson Correlation	.191**	.195**	.226**	.190**	.220**	-.355**	-.272**	-.314**
EMP2I	Pearson Correlation	.139**	.154**	.193**	.208**	.212**	-.455**	-.384**	-.342**
EMP3I	Pearson Correlation	.158**	.162**	.186**	.221**	.235**	-.438**	-.359**	-.348**
AFF1	Pearson Correlation	.167**	.145**	.140**	.161**	.149**	-.578**	-.477**	-.413**
AFF2	Pearson Correlation	.150**	.137**	.138**	.155**	.121**	-.561**	-.450**	-.385**

Inter-Item Correlation Matrix, Continued.

		OCB1IH	OCB2IH	OCB3IH	OCB4IH	OCB5IH	OCB1PI	OCB2PI	OCB3PI	OCB4PI
GRWTHSAT1	Pearson Correlation	.149**	.149**	.010	.165**	.162**	.152**	.092**	.204**	.120**
GRWTHSAT2	Pearson Correlation	.158**	.148**	.046	.185**	.190**	.150**	.129**	.243**	.156**
GRWTHSAT3	Pearson Correlation	.122**	.116**	.018	.137**	.149**	.112**	.148**	.199**	.116**
GRWTHSAT4	Pearson Correlation	.195**	.109**	.084**	.162**	.153**	.156**	.095**	.230**	.058*
EMP1M	Pearson Correlation	.276**	.266**	.155**	.269**	.295**	.240**	.216**	.387**	.179**
EMP2M	Pearson Correlation	.250**	.238**	.146**	.248**	.277**	.233**	.202**	.345**	.162**
EMP3M	Pearson Correlation	.251**	.237**	.132**	.255**	.280**	.238**	.211**	.359**	.176**
EMP1I	Pearson Correlation	.236**	.201**	.147**	.211**	.228**	.243**	.214**	.286**	.169**
EMP2I	Pearson Correlation	.145**	.138**	.089**	.162**	.163**	.197**	.171**	.204**	.115**
EMP3I	Pearson Correlation	.161**	.130**	.095**	.158**	.156**	.196**	.167**	.201**	.103**
AFF1	Pearson Correlation	.189**	.175**	.072**	.211**	.216**	.157**	.114**	.199**	.112**
AFF2	Pearson Correlation	.178**	.184**	.046	.201**	.223**	.147**	.115**	.190**	.135**

Inter-Item Correlation Matrix, Continued.

		SL1	SL2	SL3	SL4	SL5	PL1	PL2	PL3	PL4	PL5
GRWTHSAT1	Pearson Correlation	.450**	.407**	.325**	.381**	.431**	.438**	.441**	.279**	.409**	.372**
GRWTHSAT2	Pearson Correlation	.451**	.380**	.354**	.391**	.437**	.428**	.446**	.280**	.413**	.364**
GRWTHSAT3	Pearson Correlation	.458**	.376**	.373**	.371**	.434**	.418**	.483**	.280**	.430**	.377**
GRWTHSAT4	Pearson Correlation	.328**	.270**	.238**	.277**	.301**	.328**	.337**	.192**	.327**	.287**
EMP1M	Pearson Correlation	.214**	.208**	.149**	.171**	.200**	.189**	.186**	.113**	.198**	.186**
EMP2M	Pearson Correlation	.244**	.228**	.172**	.197**	.231**	.247**	.220**	.154**	.237**	.223**
EMP3M	Pearson Correlation	.239**	.223**	.163**	.185**	.223**	.234**	.215**	.143**	.234**	.209**
EMP1I	Pearson Correlation	.280**	.230**	.233**	.224**	.264**	.305**	.317**	.206**	.290**	.265**
EMP2I	Pearson Correlation	.423**	.344**	.344**	.347**	.389**	.423**	.433**	.287**	.401**	.392**
EMP3I	Pearson Correlation	.407**	.336**	.325**	.321**	.361**	.397**	.412**	.266**	.373**	.356**
AFF1	Pearson Correlation	.506**	.428**	.409**	.414**	.483**	.507**	.513**	.331**	.446**	.429**
AFF2	Pearson Correlation	.529**	.450**	.428**	.435**	.508**	.525**	.534**	.371**	.484**	.468**

Inter-Item Correlation Matrix, Continued.

		GRWTHSAT1	GRWTHSAT2	GRWTHSAT3	GRWTHSAT4	EMP1M	EMP2M	EMP3M	EMP1I	EMP2I	EMP3I
AFF3	Pearson Correlation	.386**	.375**	.340**	.263**	.186**	.219**	.226**	.228**	.314**	.303**
PJFIT1	Pearson Correlation	.624**	.618**	.548**	.640**	.525**	.583**	.560**	.484**	.510**	.517**
PJFIT2	Pearson Correlation	.148**	.213**	.157**	.069*	.265**	.222**	.254**	.200**	.166**	.163**
PJFIT3	Pearson Correlation	.587**	.615**	.559**	.588**	.503**	.584**	.565**	.461**	.519**	.508**
PJFIT4	Pearson Correlation	.570**	.620**	.516**	.596**	.568**	.604**	.616**	.482**	.494**	.484**
PJFIT5	Pearson Correlation	.276**	.377**	.295**	.215**	.278**	.281**	.308**	.281**	.303**	.300**
LGO1	Pearson Correlation	.186**	.199**	.189**	.152**	.297**	.270**	.310**	.191**	.139**	.158**
LGO2	Pearson Correlation	.189**	.190**	.202**	.175**	.285**	.279**	.291**	.195**	.154**	.162**
LGO3	Pearson Correlation	.160**	.189**	.181**	.137**	.293**	.279**	.299**	.226**	.193**	.186**
LGO4	Pearson Correlation	.144**	.174**	.191**	.136**	.236**	.233**	.244**	.190**	.208**	.221**
LGO5	Pearson Correlation	.148**	.165**	.185**	.132**	.215**	.221**	.231**	.220**	.212**	.235**

Inter-Item Correlation Matrix, Continued.

		AFF1	AFF2	AFF3	PJFIT1	PJFIT2	PJFIT3	PJFIT4	PJFIT5
AFF3	Pearson Correlation	.515**	.547**	1	.298**	.045	.320**	.281**	.173**
PJFIT1	Pearson Correlation	.590**	.553**	.298**	1	.119**	.703**	.671**	.250**
PJFIT2	Pearson Correlation	.182**	.164**	.045	.119**	1	.268**	.293**	.528**
PJFIT3	Pearson Correlation	.566**	.538**	.320**	.703**	.268**	1	.781**	.405**
PJFIT4	Pearson Correlation	.545**	.504**	.281**	.671**	.293**	.781**	1	.397**
PJFIT5	Pearson Correlation	.349**	.318**	.173**	.250**	.528**	.405**	.397**	1
LGO1	Pearson Correlation	.167**	.150**	.064*	.109**	.345**	.181**	.181**	.317**
LGO2	Pearson Correlation	.145**	.137**	.067*	.098**	.279**	.150**	.177**	.270**
LGO3	Pearson Correlation	.140**	.138**	.047	.079**	.332**	.152**	.165**	.280**
LGO4	Pearson Correlation	.161**	.155**	.072**	.092**	.233**	.146**	.151**	.269**
LGO5	Pearson Correlation	.149**	.121**	.036	.073**	.326**	.151**	.164**	.288**

Inter-Item Correlation Matrix, Continued.

		LGO1	LGO2	LGO3	LGO4	LGO5	IT1	IT2	IT3
AFF3	Pearson Correlation	.064*	.067*	.047	.072**	.036	-.400**	-.304**	-.243**
PJFIT1	Pearson Correlation	.109**	.098**	.079**	.092**	.073**	-.489**	-.472**	-.400**
PJFIT2	Pearson Correlation	.345**	.279**	.332**	.233**	.326**	-.165**	-.077**	-.084**
PJFIT3	Pearson Correlation	.181**	.150**	.152**	.146**	.151**	-.478**	-.417**	-.372**
PJFIT4	Pearson Correlation	.181**	.177**	.165**	.151**	.164**	-.491**	-.428**	-.403**
PJFIT5	Pearson Correlation	.317**	.270**	.280**	.269**	.288**	-.293**	-.212**	-.199**
LGO1	Pearson Correlation	1	.661**	.691**	.505**	.527**	-.146**	-.014	-.091**
LGO2	Pearson Correlation	.661**	1	.751**	.571**	.573**	-.172**	.004	-.056*
LGO3	Pearson Correlation	.691**	.751**	1	.620**	.648**	-.158**	-.009	-.058*
LGO4	Pearson Correlation	.505**	.571**	.620**	1	.622**	-.115**	-.004	-.076**
LGO5	Pearson Correlation	.527**	.573**	.648**	.622**	1	-.091**	.024	-.059*

Inter-Item Correlation Matrix, Continued.

		OCB1IH	OCB2IH	OCB3IH	OCB4IH	OCB5IH	OCB1PI	OCB2PI	OCB3PI	OCB4PI
AFF3	Pearson Correlation	.065*	.048	-.060*	.044	.106**	.017	-.053	.031	.017
PJFIT1	Pearson Correlation	.135**	.104**	.075**	.150**	.138**	.174**	.126**	.218**	.099**
PJFIT2	Pearson Correlation	.255**	.223**	.107**	.209**	.230**	.191**	.386**	.342**	.347**
PJFIT3	Pearson Correlation	.154**	.135**	.059*	.162**	.163**	.149**	.173**	.245**	.175**
PJFIT4	Pearson Correlation	.200**	.181**	.085**	.177**	.189**	.200**	.169**	.286**	.165**
PJFIT5	Pearson Correlation	.179**	.178**	.082**	.191**	.209**	.164**	.298**	.299**	.285**
LGO1	Pearson Correlation	.323**	.258**	.139**	.270**	.266**	.183**	.244**	.337**	.266**
LGO2	Pearson Correlation	.332**	.260**	.160**	.269**	.279**	.190**	.240**	.337**	.246**
LGO3	Pearson Correlation	.359**	.289**	.175**	.312**	.296**	.237**	.284**	.376**	.264**
LGO4	Pearson Correlation	.310**	.231**	.162**	.224**	.248**	.192**	.239**	.283**	.215**
LGO5	Pearson Correlation	.320**	.273**	.190**	.261**	.249**	.241**	.332**	.375**	.246**

Inter-Item Correlation Matrix, Continued.

		SL1	SL2	SL3	SL4	SL5	PL1	PL2	PL3	PL4	PL5
AFF3	Pearson Correlation	.404**	.354**	.361**	.344**	.403**	.391**	.415**	.290**	.399**	.346**
PJFIT1	Pearson Correlation	.336**	.289**	.279**	.304**	.342**	.348**	.370**	.246**	.334**	.333**
PJFIT2	Pearson Correlation	.115**	.105**	.087**	.070*	.104**	.073**	.074**	.071*	.092**	.087**
PJFIT3	Pearson Correlation	.339**	.286**	.277**	.275**	.345**	.328**	.344**	.212**	.323**	.321**
PJFIT4	Pearson Correlation	.297**	.244**	.232**	.228**	.288**	.279**	.289**	.190**	.290**	.276**
PJFIT5	Pearson Correlation	.249**	.199**	.173**	.211**	.226**	.243**	.223**	.136**	.227**	.194**
LGO1	Pearson Correlation	.116**	.073**	.062*	.067*	.083**	.067*	.070*	.014	.073**	.070*
LGO2	Pearson Correlation	.171**	.144**	.102**	.109**	.126**	.108**	.112**	.060*	.155**	.128**
LGO3	Pearson Correlation	.142**	.100**	.096**	.070*	.100**	.098**	.102**	.034	.125**	.113**
LGO4	Pearson Correlation	.133**	.078**	.080**	.075**	.077**	.065*	.086**	.013	.115**	.090**
LGO5	Pearson Correlation	.126**	.099**	.081**	.110**	.108**	.094**	.103**	.034	.122**	.123**

Inter-Item Correlation Matrix, Continued.

		GRWTHSAT1	GRWTHSAT2	GRWTHSAT3	GRWTHSAT4	EMP1M	EMP2M	EMP3M	EMP1I	EMP2I	EMP3I
IT1	Pearson Correlation	-.556**	-.581**	-.461**	-.461**	-.408**	-.467**	-.461**	-.355**	-.455**	-.438**
IT2	Pearson Correlation	-.453**	-.486**	-.395**	-.433**	-.320**	-.368**	-.358**	-.272**	-.384**	-.359**
IT3	Pearson Correlation	-.384**	-.402**	-.370**	-.404**	-.333**	-.368**	-.364**	-.314**	-.342**	-.348**
OCB1IH	Pearson Correlation	.149**	.158**	.122**	.195**	.276**	.250**	.251**	.236**	.145**	.161**
OCB2IH	Pearson Correlation	.149**	.148**	.116**	.109**	.266**	.238**	.237**	.201**	.138**	.130**
OCB3IH	Pearson Correlation	.010	.046	.018	.084**	.155**	.146**	.132**	.147**	.089**	.095**
OCB4IH	Pearson Correlation	.165**	.185**	.137**	.162**	.269**	.248**	.255**	.211**	.162**	.158**
OCB5IH	Pearson Correlation	.162**	.190**	.149**	.153**	.295**	.277**	.280**	.228**	.163**	.156**
OCB1PI	Pearson Correlation	.152**	.150**	.112**	.156**	.240**	.233**	.238**	.243**	.197**	.196**
OCB2PI	Pearson Correlation	.092**	.129**	.148**	.095**	.216**	.202**	.211**	.214**	.171**	.167**
OCB3PI	Pearson Correlation	.204**	.243**	.199**	.230**	.387**	.345**	.359**	.286**	.204**	.201**
OCB4PI	Pearson Correlation	.120**	.156**	.116**	.058*	.179**	.162**	.176**	.169**	.115**	.103**

Inter-Item Correlation Matrix, Continued.

		AFF1	AFF2	AFF3	PJFIT1	PJFIT2	PJFIT3	PJFIT4	PJFIT5
IT1	Pearson Correlation	-.578**	-.561**	-.400**	-.489**	-.165**	-.478**	-.491**	-.293**
IT2	Pearson Correlation	-.477**	-.450**	-.304**	-.472**	-.077**	-.417**	-.428**	-.212**
IT3	Pearson Correlation	-.413**	-.385**	-.243**	-.400**	-.084**	-.372**	-.403**	-.199**
OCB1IH	Pearson Correlation	.189**	.178**	.065*	.135**	.255**	.154**	.200**	.179**
OCB2IH	Pearson Correlation	.175**	.184**	.048	.104**	.223**	.135**	.181**	.178**
OCB3IH	Pearson Correlation	.072**	.046	-.060*	.075**	.107**	.059*	.085**	.082**
OCB4IH	Pearson Correlation	.211**	.201**	.044	.150**	.209**	.162**	.177**	.191**
OCB5IH	Pearson Correlation	.216**	.223**	.106**	.138**	.230**	.163**	.189**	.209**
OCB1PI	Pearson Correlation	.157**	.147**	.017	.174**	.191**	.149**	.200**	.164**
OCB2PI	Pearson Correlation	.114**	.115**	-.053	.126**	.386**	.173**	.169**	.298**
OCB3PI	Pearson Correlation	.199**	.190**	.031	.218**	.342**	.245**	.286**	.299**
OCB4PI	Pearson Correlation	.112**	.135**	.017	.099**	.347**	.175**	.165**	.285**

Inter-Item Correlation Matrix, Continued.

		LGO1	LGO2	LGO3	LGO4	LGO5	IT1	IT2	IT3
IT1	Pearson Correlation	-.146**	-.172**	-.158**	-.115**	-.091**	1	.655**	.505**
IT2	Pearson Correlation	-.014	.004	-.009	-.004	.024	.655**	1	.578**
IT3	Pearson Correlation	-.091**	-.056*	-.058*	-.076**	-.059*	.505**	.578**	1
OCB1IH	Pearson Correlation	.323**	.332**	.359**	.310**	.320**	-.092**	-.076**	-.168**
OCB2IH	Pearson Correlation	.258**	.260**	.289**	.231**	.273**	-.093**	-.048	-.128**
OCB3IH	Pearson Correlation	.139**	.160**	.175**	.162**	.190**	.014	-.028	-.066*
OCB4IH	Pearson Correlation	.270**	.269**	.312**	.224**	.261**	-.100**	-.075**	-.104**
OCB5IH	Pearson Correlation	.266**	.279**	.296**	.248**	.249**	-.142**	-.097**	-.119**
OCB1PI	Pearson Correlation	.183**	.190**	.237**	.192**	.241**	-.135**	-.053	-.118**
OCB2PI	Pearson Correlation	.244**	.240**	.284**	.239**	.332**	-.071*	-.024	-.094**
OCB3PI	Pearson Correlation	.337**	.337**	.376**	.283**	.375**	-.148**	-.130**	-.151**
OCB4PI	Pearson Correlation	.266**	.246**	.264**	.215**	.246**	-.115**	-.078**	-.076**

Inter-Item Correlation Matrix, Continued.

		OCB1IH	OCB2IH	OCB3IH	OCB4IH	OCB5IH	OCB1PI	OCB2PI	OCB3PI	OCB4PI
IT1	Pearson Correlation	-.092**	-.093**	.014	-.100**	-.142**	-.135**	-.071*	-.148**	-.115**
IT2	Pearson Correlation	-.076**	-.048	-.028	-.075**	-.097**	-.053	-.024	-.130**	-.078**
IT3	Pearson Correlation	-.168**	-.128**	-.066*	-.104**	-.119**	-.118**	-.094**	-.151**	-.076**
OCB1IH	Pearson Correlation	1	.572**	.332**	.522**	.489**	.224**	.270**	.411**	.259**
OCB2IH	Pearson Correlation	.572**	1	.367**	.702**	.470**	.201**	.238**	.353**	.273**
OCB3IH	Pearson Correlation	.332**	.367**	1	.403**	.276**	.262**	.214**	.266**	.203**
OCB4IH	Pearson Correlation	.522**	.702**	.403**	1	.584**	.228**	.301**	.434**	.320**
OCB5IH	Pearson Correlation	.489**	.470**	.276**	.584**	1	.243**	.286**	.441**	.319**
OCB1PI	Pearson Correlation	.224**	.201**	.262**	.228**	.243**	1	.379**	.391**	.303**
OCB2PI	Pearson Correlation	.270**	.238**	.214**	.301**	.286**	.379**	1	.668**	.479**
OCB3PI	Pearson Correlation	.411**	.353**	.266**	.434**	.441**	.391**	.668**	1	.519**
OCB4PI	Pearson Correlation	.259**	.273**	.203**	.320**	.319**	.303**	.479**	.519**	1

Inter-Item Correlation Matrix, Continued.

		SL1	SL2	SL3	SL4	SL5	PL1	PL2	PL3	PL4	PL5
IT1	Pearson Correlation	-.446**	-.377**	-.385**	-.354**	-.421**	-.395**	-.429**	-.297**	-.348**	-.309**
IT2	Pearson Correlation	-.318**	-.277**	-.284**	-.267**	-.325**	-.308**	-.342**	-.237**	-.284**	-.257**
IT3	Pearson Correlation	-.270**	-.261**	-.216**	-.222**	-.303**	-.248**	-.283**	-.157**	-.231**	-.220**
OCB1IH	Pearson Correlation	.108**	.123**	.040	.096**	.090**	.112**	.102**	.016	.114**	.072**
OCB2IH	Pearson Correlation	.111**	.103**	.048	.119**	.105**	.091**	.087**	.052	.094**	.085**
OCB3IH	Pearson Correlation	.029	.027	.015	.037	.003	-.022	-.012	.039	.029	.036
OCB4IH	Pearson Correlation	.132**	.114**	.070*	.122**	.133**	.118**	.123**	.070*	.122**	.089**
OCB5IH	Pearson Correlation	.191**	.157**	.085**	.154**	.171**	.146**	.169**	.099**	.152**	.101**
OCB1PI	Pearson Correlation	.165**	.116**	.111**	.129**	.138**	.106**	.139**	.061*	.095**	.097**
OCB2PI	Pearson Correlation	.112**	.033	.082**	.070*	.088**	.041	.075**	.031	.061*	.042
OCB3PI	Pearson Correlation	.167**	.100**	.080**	.105**	.138**	.074**	.120**	.057*	.110**	.082**
OCB4PI	Pearson Correlation	.166**	.128**	.078**	.120**	.128**	.101**	.122**	.063*	.101**	.086**

Inter-Item Correlation Matrix, Continued.

		GRWTHSAT1	GRWTHSAT2	GRWTHSAT3	GRWTHSAT4	EMP1M	EMP2M	EMP3M	EMP1I	EMP2I	EMP3I
SL1	Pearson Correlation	.450**	.451**	.458**	.328**	.214**	.244**	.239**	.280**	.423**	.407**
SL2	Pearson Correlation	.407**	.380**	.376**	.270**	.208**	.228**	.223**	.230**	.344**	.336**
SL3	Pearson Correlation	.325**	.354**	.373**	.238**	.149**	.172**	.163**	.233**	.344**	.325**
SL4	Pearson Correlation	.381**	.391**	.371**	.277**	.171**	.197**	.185**	.224**	.347**	.321**
SL5	Pearson Correlation	.431**	.437**	.434**	.301**	.200**	.231**	.223**	.264**	.389**	.361**
PL1	Pearson Correlation	.438**	.428**	.418**	.328**	.189**	.247**	.234**	.305**	.423**	.397**
PL2	Pearson Correlation	.441**	.446**	.483**	.337**	.186**	.220**	.215**	.317**	.433**	.412**
PL3	Pearson Correlation	.279**	.280**	.280**	.192**	.113**	.154**	.143**	.206**	.287**	.266**
PL4	Pearson Correlation	.409**	.413**	.430**	.327**	.198**	.237**	.234**	.290**	.401**	.373**
PL5	Pearson Correlation	.372**	.364**	.377**	.287**	.186**	.223**	.209**	.265**	.392**	.356**

Inter-Item Correlation Matrix, Continued.

		AFF1	AFF2	AFF3	PJFIT1	PJFIT2	PJFIT3	PJFIT4	PJFIT5
SL1	Pearson Correlation	.506**	.529**	.404**	.336**	.115**	.339**	.297**	.249**
SL2	Pearson Correlation	.428**	.450**	.354**	.289**	.105**	.286**	.244**	.199**
SL3	Pearson Correlation	.409**	.428**	.361**	.279**	.087**	.277**	.232**	.173**
SL4	Pearson Correlation	.414**	.435**	.344**	.304**	.070*	.275**	.228**	.211**
SL5	Pearson Correlation	.483**	.508**	.403**	.342**	.104**	.345**	.288**	.226**
PL1	Pearson Correlation	.507**	.525**	.391**	.348**	.073**	.328**	.279**	.243**
PL2	Pearson Correlation	.513**	.534**	.415**	.370**	.074**	.344**	.289**	.223**
PL3	Pearson Correlation	.331**	.371**	.290**	.246**	.071*	.212**	.190**	.136**
PL4	Pearson Correlation	.446**	.484**	.399**	.334**	.092**	.323**	.290**	.227**
PL5	Pearson Correlation	.429**	.468**	.346**	.333**	.087**	.321**	.276**	.194**

Inter-Item Correlation Matrix, Continued.

		LGO1	LGO2	LGO3	LGO4	LGO5	IT1	IT2	IT3
SL1	Pearson Correlation	.116**	.171**	.142**	.133**	.126**	-.446**	-.318**	-.270**
SL2	Pearson Correlation	.073**	.144**	.100**	.078**	.099**	-.377**	-.277**	-.261**
SL3	Pearson Correlation	.062*	.102**	.096**	.080**	.081**	-.385**	-.284**	-.216**
SL4	Pearson Correlation	.067*	.109**	.070*	.075**	.110**	-.354**	-.267**	-.222**
SL5	Pearson Correlation	.083**	.126**	.100**	.077**	.108**	-.421**	-.325**	-.303**
PL1	Pearson Correlation	.067*	.108**	.098**	.065*	.094**	-.395**	-.308**	-.248**
PL2	Pearson Correlation	.070*	.112**	.102**	.086**	.103**	-.429**	-.342**	-.283**
PL3	Pearson Correlation	.014	.060*	.034	.013	.034	-.297**	-.237**	-.157**
PL4	Pearson Correlation	.073**	.155**	.125**	.115**	.122**	-.348**	-.284**	-.231**
PL5	Pearson Correlation	.070*	.128**	.113**	.090**	.123**	-.309**	-.257**	-.220**

Inter-Item Correlation Matrix, Continued.

		OCB1IH	OCB2IH	OCB3IH	OCB4IH	OCB5IH	OCB1PI	OCB2PI	OCB3PI	OCB4PI
SL1	Pearson Correlation	.108**	.111**	.029	.132**	.191**	.165**	.112**	.167**	.166**
SL2	Pearson Correlation	.123**	.103**	.027	.114**	.157**	.116**	.033	.100**	.128**
SL3	Pearson Correlation	.040	.048	.015	.070*	.085**	.111**	.082**	.080**	.078**
SL4	Pearson Correlation	.096**	.119**	.037	.122**	.154**	.129**	.070*	.105**	.120**
SL5	Pearson Correlation	.090**	.105**	.003	.133**	.171**	.138**	.088**	.138**	.128**
PL1	Pearson Correlation	.112**	.091**	-.022	.118**	.146**	.106**	.041	.074**	.101**
PL2	Pearson Correlation	.102**	.087**	-.012	.123**	.169**	.139**	.075**	.120**	.122**
PL3	Pearson Correlation	.016	.052	.039	.070*	.099**	.061*	.031	.057*	.063*
PL4	Pearson Correlation	.114**	.094**	.029	.122**	.152**	.095**	.061*	.110**	.101**
PL5	Pearson Correlation	.072**	.085**	.036	.089**	.101**	.097**	.042	.082**	.086**

Inter-Item Correlation Matrix, Continued.

		SL1	SL2	SL3	SL4	SL5	PL1	PL2	PL3	PL4	PL5
SL1	Pearson Correlation	1	.683**	.671**	.631**	.775**	.666**	.764**	.473**	.617**	.556**
SL2	Pearson Correlation	.683**	1	.498**	.605**	.663**	.562**	.629**	.378**	.534**	.486**
SL3	Pearson Correlation	.671**	.498**	1	.473**	.670**	.547**	.633**	.495**	.489**	.464**
SL4	Pearson Correlation	.631**	.605**	.473**	1	.718**	.617**	.672**	.378**	.553**	.509**
SL5	Pearson Correlation	.775**	.663**	.670**	.718**	1	.699**	.778**	.483**	.622**	.569**
PL1	Pearson Correlation	.666**	.562**	.547**	.617**	.699**	1	.773**	.521**	.699**	.653**
PL2	Pearson Correlation	.764**	.629**	.633**	.672**	.778**	.773**	1	.519**	.721**	.631**
PL3	Pearson Correlation	.473**	.378**	.495**	.378**	.483**	.521**	.519**	1	.526**	.484**
PL4	Pearson Correlation	.617**	.534**	.489**	.553**	.622**	.699**	.721**	.526**	1	.796**
PL5	Pearson Correlation	.556**	.486**	.464**	.509**	.569**	.653**	.631**	.484**	.796**	1

APPENDIX D

IRB APPROVAL AND PARTICIPANT CONSENT FORM

CONSENT FORM

An exploratory model regarding the relationships of higher education non-academic middle managers leadership behaviors, employee perceptions of meaningful work, and employee outcomes.

Introduction
The purpose of this form is to provide you (as a prospective research study participant) information that may affect your decision as to whether or not to participate in this research.

The purpose of this study is to investigate the relationship among non-academic middle manager participative and supportive leadership behaviors, employee perceptions of meaningful work, and employee behavioral outcomes. You were selected to be a possible participant because you are a non-faculty employee who works within a public four-year higher education institution in the U.S. and reports to a non-academic middle manager.

Who will know about my participation in this research study?
This study is confidential. The records of this study will be kept private. No identifiers linking you to this study will be included in any sort of report that might be published. Research data will be stored securely in password protected electronic files or in on-campus office locked file cabinet. Only the researcher, Laura Hammons, will have access to the data. Texas A&M University will be providing the researcher with additional demographic information about survey respondents, such as gender, length of service, job title, etc.; however, your employer will not be informed about your individual responses.

What will I be asked to do?
If you agree to participate in this study, you will be asked to complete a paper survey related to your work. The copy of the survey is included with this signed consent form. The questions in the survey ask about your attitudes and feelings about your work environment and those with whom you work, along with several demographic questions. This survey will take approximately [10-15, TBD in pilot study] minutes to complete.

What are the risks involved in this study?
The risks associated with this study are minimal, and are not greater than risks ordinarily encountered in daily life.

What are the possible benefits of this study?
You will receive no direct benefit from participating in this study; however your responses will be adding new knowledge to our understanding of non-academic work in higher education. Your responses will also help researchers develop new theories and models with respect to non-academic higher education middle managers and employees. Finally, your responses have the potential to guide higher education human resource personnel and administrators decision making about middle manager leadership training, as well as motivating and retaining employees.

Revised 5/2/2012 by LRH

Texas A&M University IRB Approval From: 05/16/2012 To: 05/15/2013
IRB Protocol #2012-0109 Authorized by: SD

Do I *have* to participate?
No, your participation is voluntary. You may decide not to participate or to withdraw at any time without your current or future relations with Texas A&M University being affected. **Whom do I contact with questions about the research?**
If you have questions regarding this study, you may contact Laura Hammons, at lhammons@tamu.edu or 979-xxx-xxxx or Dr. Toby Egan, Dissertation Chair, at egan@tamu.edu.

Whom do I contact about my rights as a research participant?
This research study has been reviewed by the Human Subjects' Protection Program and/or the Institutional Review Board at Texas A&M University. For research-related problems or questions regarding your rights as a research participant, you can contact these offices at (979)458-4067 or irb@tamu.edu.

Participation
Please be sure you have read the above information, asked questions and received answers to your satisfaction. You will be given a copy of this consent form for your records. Your signature is not required. Your voluntary access to the survey and your completion of the survey serves as your consent to participation.

Thank you very much in advance for your participation!

STATEMENT OF CONSENT

I agree to be in this study and know that I am not giving up any legal rights by signing this form. The procedures, risks, and benefits have been explained to me, and my questions have been answered. I know that new information about this research study will be provided to me as it becomes available and that the researcher will tell me if I must be removed from the study. I can ask more questions if I want. A copy of this entire, signed consent form will be given to me.

Signature of Participant: _____ Date: _____

Printed Name:

_____

INVESTIGATOR'S AFFIDAVIT:

Either I have or my agent has carefully explained to the participant the nature of the above project. I hereby certify that to the best of my knowledge the person who signed this consent form was informed of the nature, demands, benefits, and risks involved in his/her participation.

Signature of Presenter: _____ Date: _____

Printed Name:

_____

Revised 5/2/2012 by LRH

Texas A&M University IRB Approval	From: 05/16/2012	To: 05/15/2013
IRB Protocol #2012-0109	Authorized by: SD	

APPENDIX E

ONLINE SURVEY INSTRUMENT

What are the risks involved in this study?
The risks associated with this study are minimal, and are not greater than risks ordinarily encountered in daily life.

What are the possible benefits of this study?
You will receive no direct benefit from participating in this study; however your responses will be adding new knowledge to our understanding of non-academic work in higher education. Your responses will also help researchers develop new theories and models with respect to non-academic higher education middle managers and employees. Finally, your responses have the potential to guide higher education human resource personnel and administrators decision making about middle manager leadership training, as well as motivating and retaining employees.

Do I *have* to participate?
No, your participation is voluntary. You may decide not to participate or to withdraw at any time without your current or future relations with Texas A&M University being affected.

Whom do I contact with questions about the research?
If you have questions regarding this study, you may contact Laura Hammons, at lhammons@tamu.edu or 979-[redacted] or Dr. Toby Egan, Dissertation Chair, at egan@tamu.edu.

Whom do I contact about my rights as a research participant?
This research study has been reviewed by the Human Subjects' Protection Program and/or the Institutional Review Board at Texas A&M University. For research-related problems or questions regarding your rights as a research participant, you can contact these offices at (979)458-4067 or irb@tamu.edu.

Participation
Please be sure you have read the above information, asked questions and received answers to your satisfaction. Your signature on this information sheet is not required. Your voluntary access to the survey and your completion of the survey serves as your consent to participation.

Thank you very much in advance for your participation!

To access the study, please click "Next" below.

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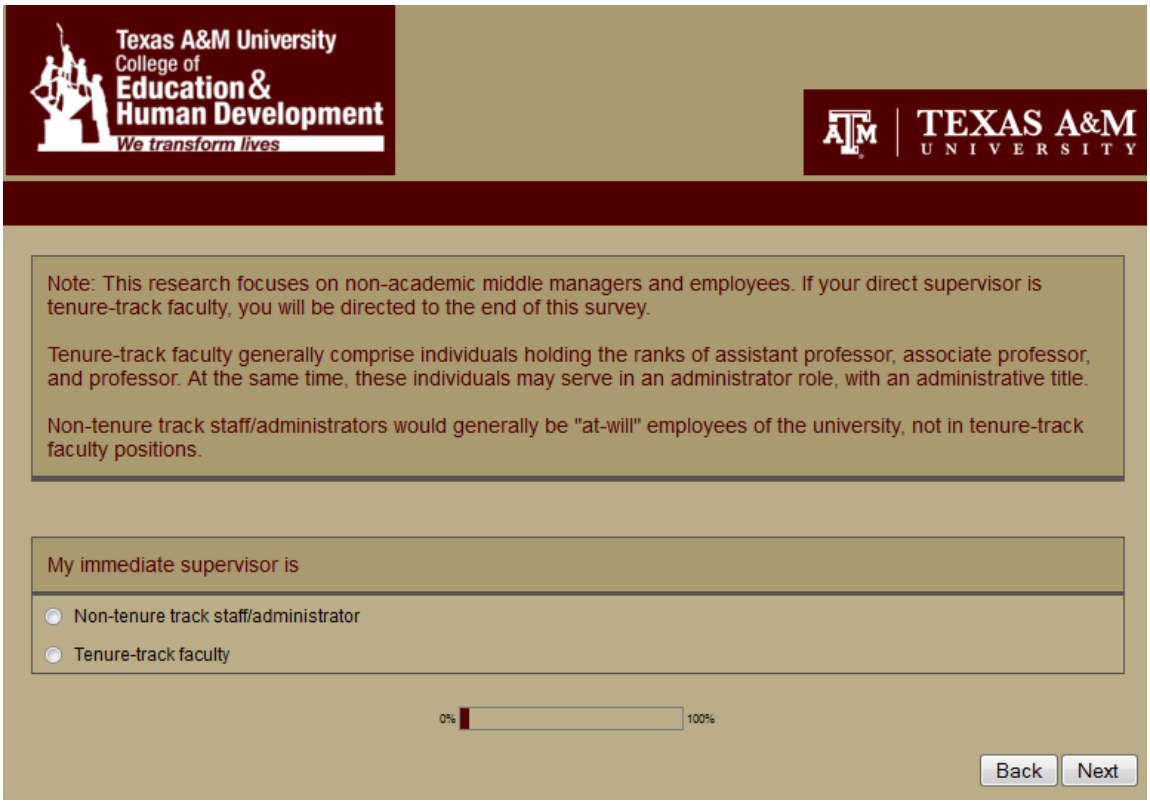
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Note: This research focuses on non-academic middle managers and employees. If your direct supervisor is tenure-track faculty, you will be directed to the end of this survey.
Tenure-track faculty generally comprise individuals holding the ranks of assistant professor, associate professor, and professor. At the same time, these individuals may serve in an administrator role, with an administrative title.
Non-tenure track staff/administrators would generally be "at-will" employees of the university, not in tenure-track faculty positions.
My immediate supervisor is
Non-tenure track staff/administrator
Tenure-track faculty
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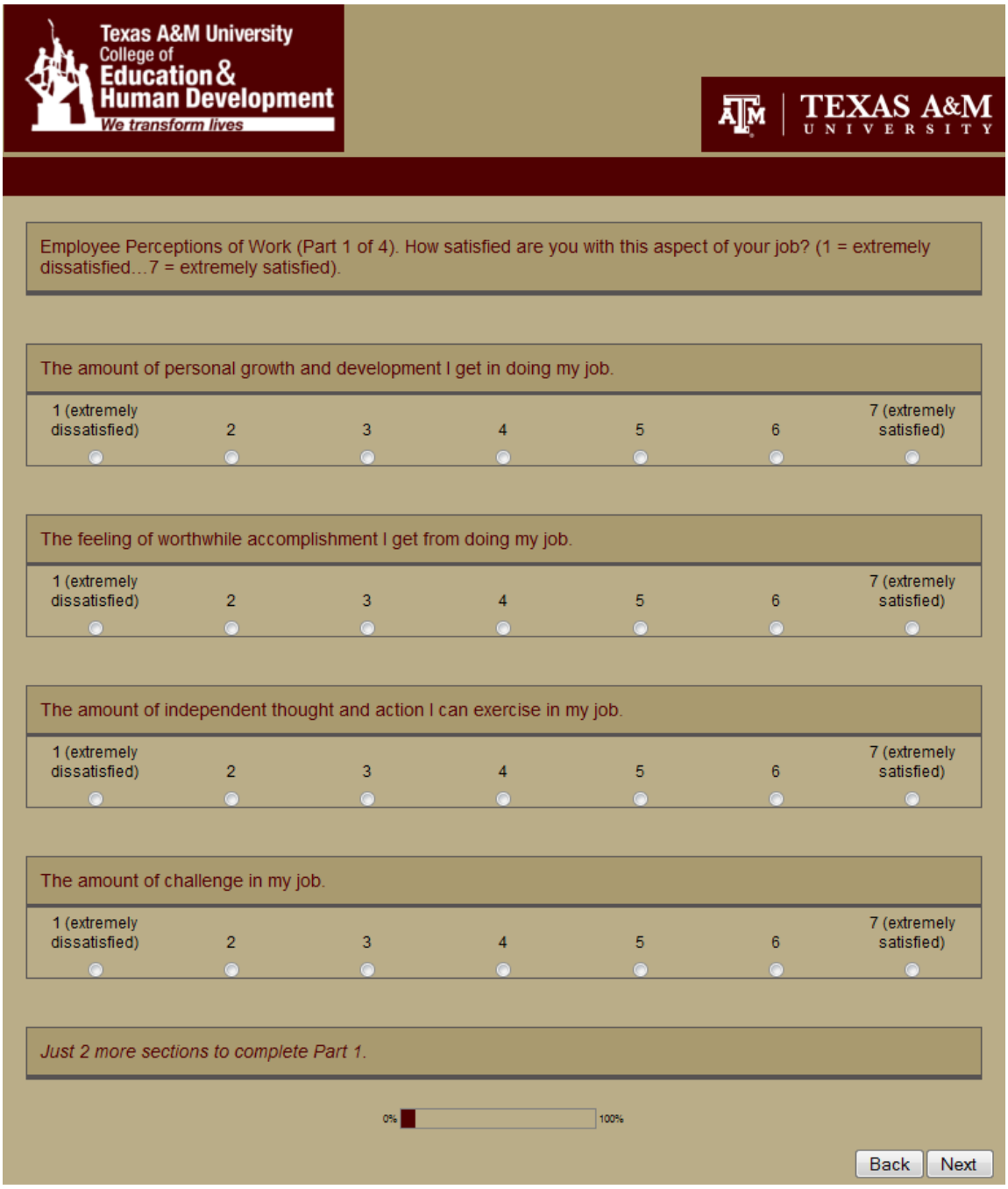
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Employee Perceptions of Work (Part 1 of 4). How satisfied are you with this aspect of your job? (1 = extremely dissatisfied…7 = extremely satisfied).
The amount of personal growth and development I get in doing my job.
1 (extremely dissatisfied)
2
3
4
5
6
7 (extremely satisfied)
The feeling of worthwhile accomplishment I get from doing my job.
1 (extremely dissatisfied)
2
3
4
5
6
7 (extremely satisfied)
The amount of independent thought and action I can exercise in my job.
1 (extremely dissatisfied)
2
3
4
5
6
7 (extremely satisfied)
The amount of challenge in my job.
1 (extremely dissatisfied)
2
3
4
5
6
7 (extremely satisfied)
Just 2 more sections to complete Part 1.
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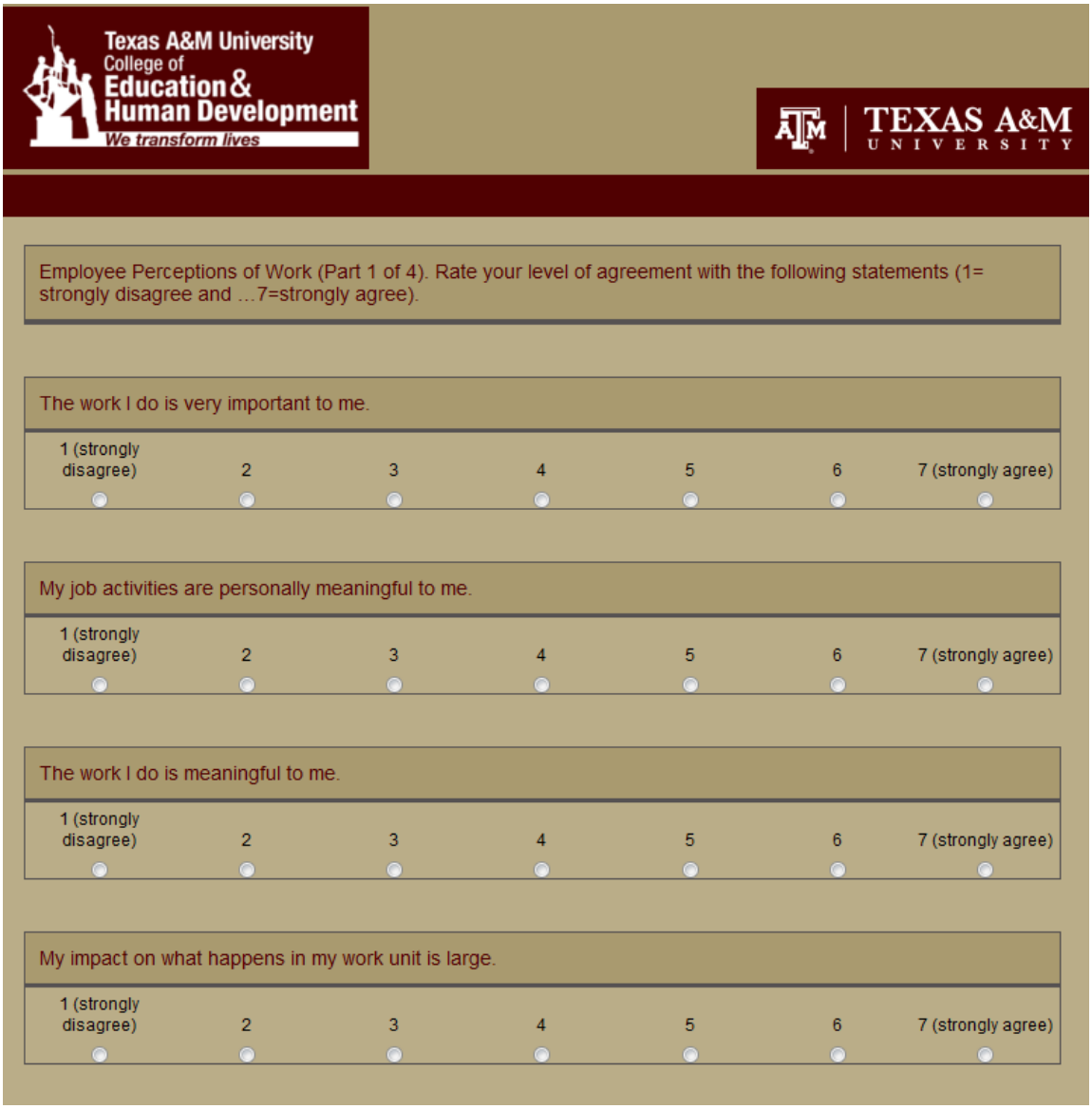
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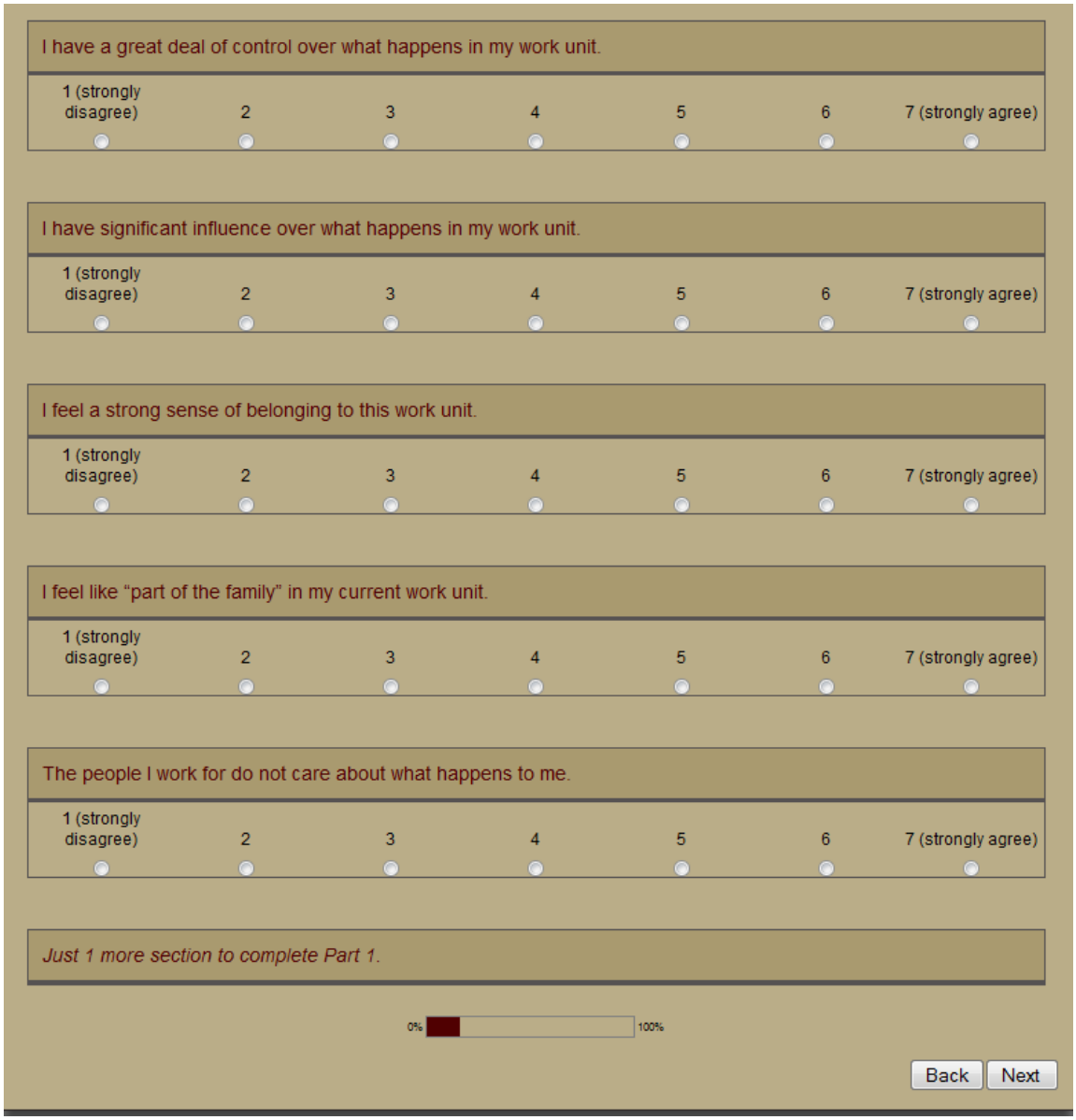
Employee Perceptions of Work (Part 1 of 4). Rate your level of agreement with the following statements (1= strongly disagree and ...7=strongly agree).
The work I do is very important to me.
1 (strongly disagree)
2
3
4
5
6
7 (strongly agree)
My job activities are personally meaningful to me.
1 (strongly disagree)
2
3
4
5
6
7 (strongly agree)
The work I do is meaningful to me.
1 (strongly disagree)
2
3
4
5
6
7 (strongly agree)
My impact on what happens in my work unit is large.
1 (strongly disagree)
2
3
4
5
6
7 (strongly agree)


I have a great deal of control over what happens in my work unit.
1 (strongly disagree)
2
3
4
5
6
7 (strongly agree)
I have significant influence over what happens in my work unit.
1 (strongly disagree)
2
3
4
5
6
7 (strongly agree)
I feel a strong sense of belonging to this work unit.
1 (strongly disagree)
2
3
4
5
6
7 (strongly agree)
I feel like “part of the family” in my current work unit.
1 (strongly disagree)
2
3
4
5
6
7 (strongly agree)
The people I work for do not care about what happens to me.
1 (strongly disagree)
2
3
4
5
6
7 (strongly agree)
Just 1 more section to complete Part 1.
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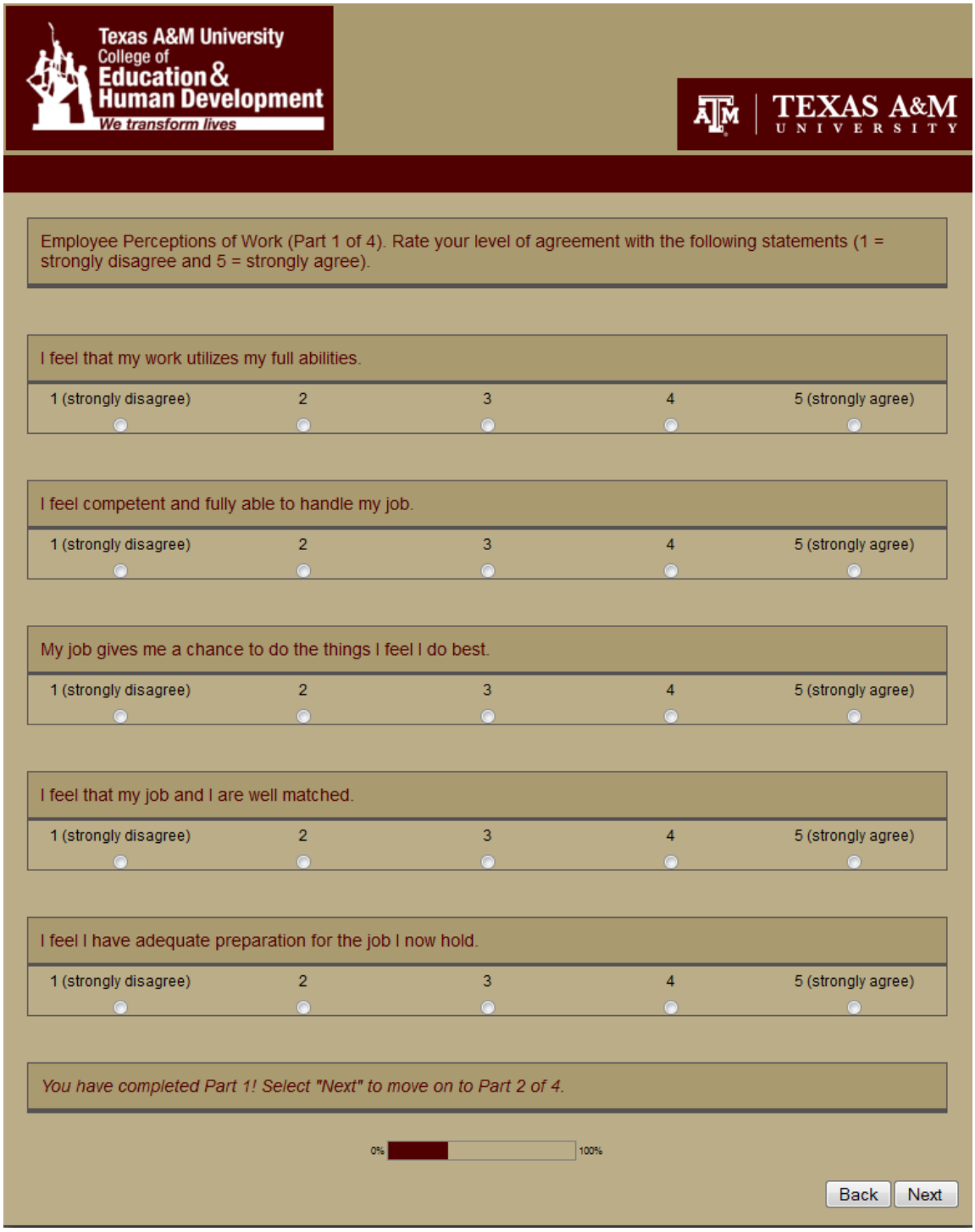
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Employee Perceptions of Work (Part 1 of 4). Rate your level of agreement with the following statements (1 = strongly disagree and 5 = strongly agree).
I feel that my work utilizes my full abilities.
1 (strongly disagree)
2
3
4
5 (strongly agree)
I feel competent and fully able to handle my job.
1 (strongly disagree)
2
3
4
5 (strongly agree)
My job gives me a chance to do the things I feel I do best.
1 (strongly disagree)
2
3
4
5 (strongly agree)
I feel that my job and I are well matched.
1 (strongly disagree)
2
3
4
5 (strongly agree)
I feel I have adequate preparation for the job I now hold.
1 (strongly disagree)
2
3
4
5 (strongly agree)
You have completed Part 1! Select "Next" to move on to Part 2 of 4.
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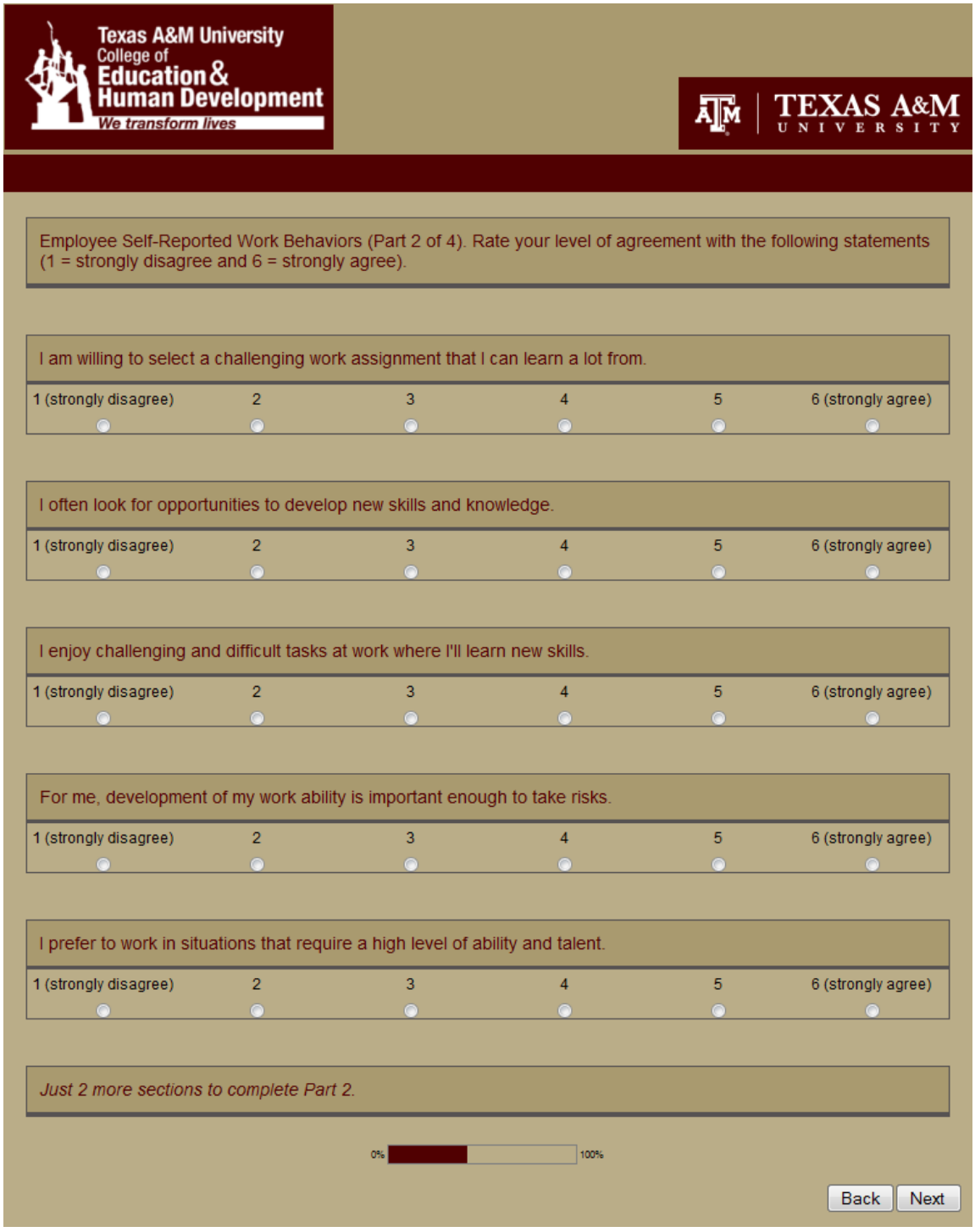
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Employee Self-Reported Work Behaviors (Part 2 of 4). Rate your level of agreement with the following statements (1 = strongly disagree and 6 = strongly agree).
I am willing to select a challenging work assignment that I can learn a lot from.
1 (strongly disagree) 2 3 4 5 6 (strongly agree)
I often look for opportunities to develop new skills and knowledge.
1 (strongly disagree) 2 3 4 5 6 (strongly agree)
I enjoy challenging and difficult tasks at work where I'll learn new skills.
1 (strongly disagree) 2 3 4 5 6 (strongly agree)
For me, development of my work ability is important enough to take risks.
1 (strongly disagree) 2 3 4 5 6 (strongly agree)
I prefer to work in situations that require a high level of ability and talent.
1 (strongly disagree) 2 3 4 5 6 (strongly agree)
Just 2 more sections to complete Part 2.
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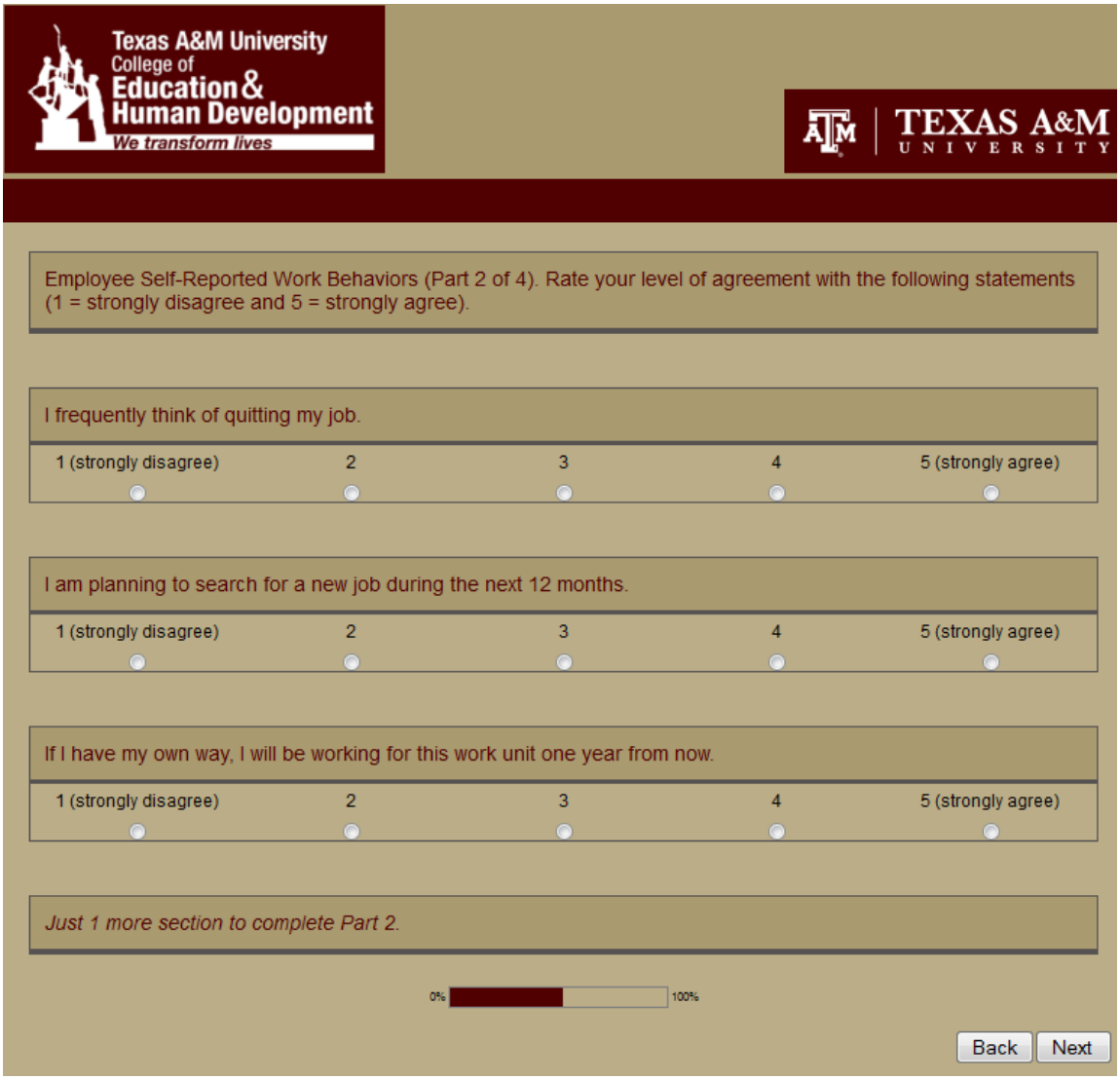
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Employee Self-Reported Work Behaviors (Part 2 of 4). Rate your level of agreement with the following statements (1 = strongly disagree and 5 = strongly agree).
I frequently think of quitting my job.
1 (strongly disagree)
2
3
4
5 (strongly agree)
I am planning to search for a new job during the next 12 months.
1 (strongly disagree)
2
3
4
5 (strongly agree)
If I have my own way, I will be working for this work unit one year from now.
1 (strongly disagree)
2
3
4
5 (strongly agree)
Just 1 more section to complete Part 2.
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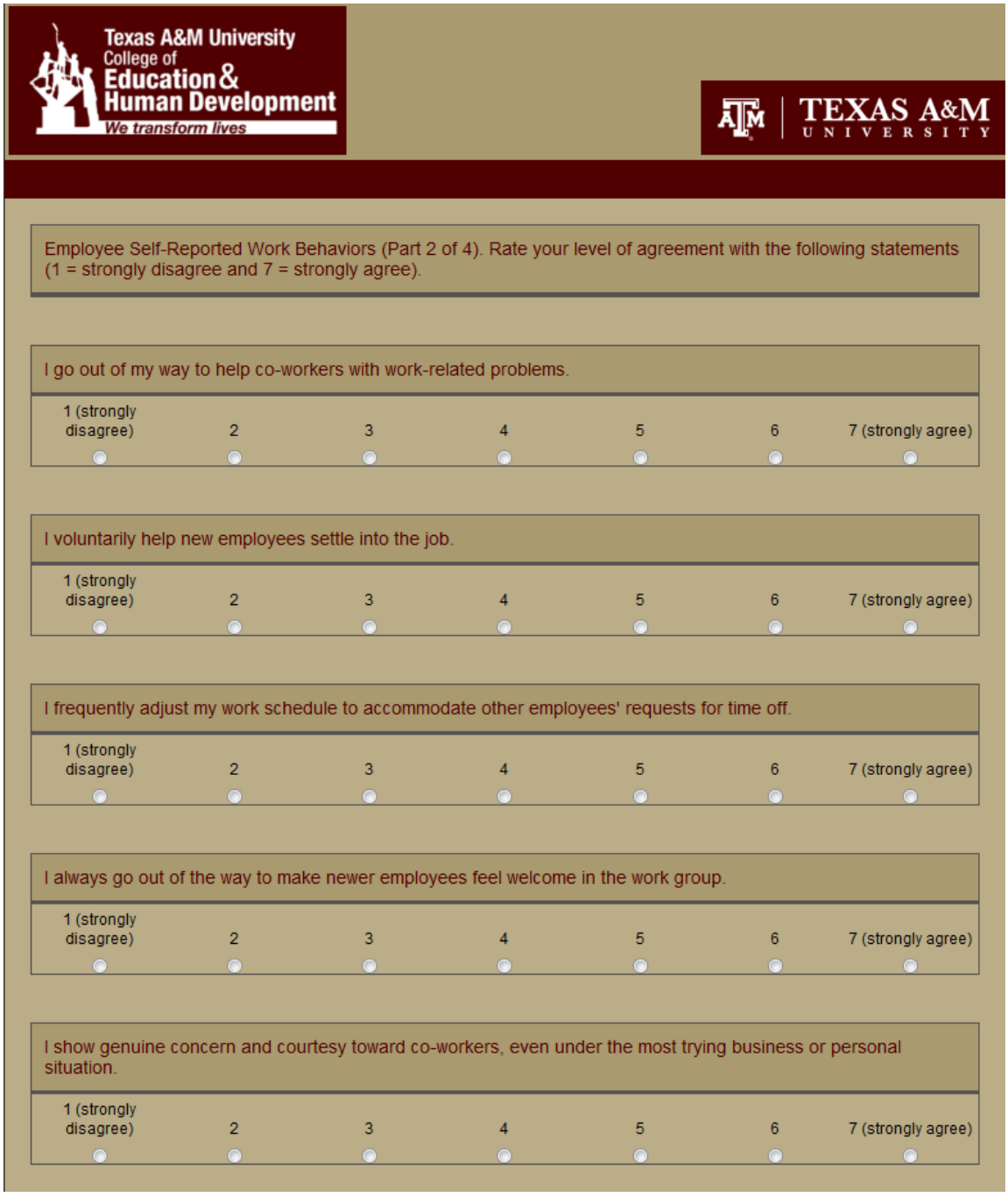
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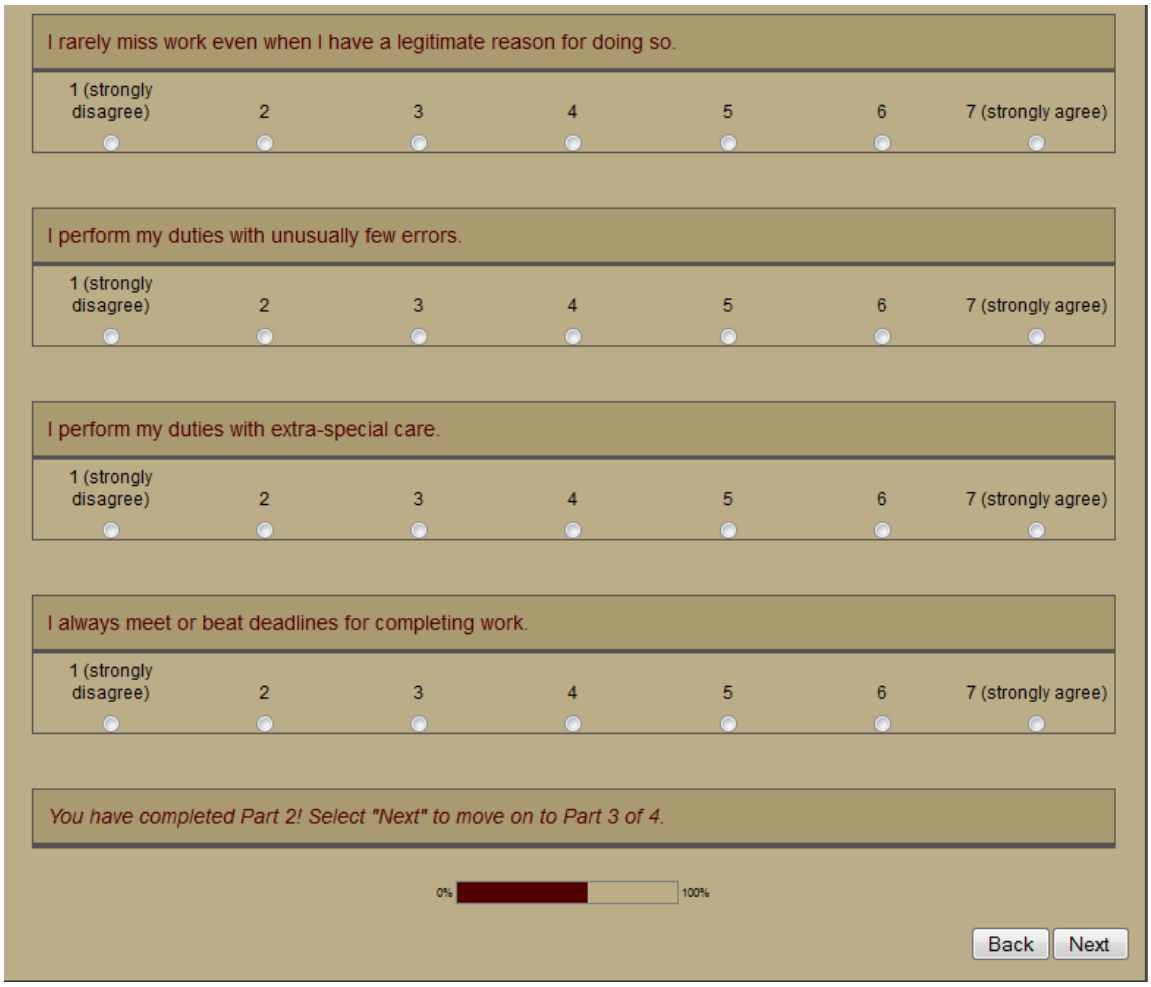
Employee Self-Reported Work Behaviors (Part 2 of 4). Rate your level of agreement with the following statements (1 = strongly disagree and 7 = strongly agree).
I go out of my way to help co-workers with work-related problems.
1 (strongly disagree) 2 3 4 5 6 7 (strongly agree)
I voluntarily help new employees settle into the job.
1 (strongly disagree) 2 3 4 5 6 7 (strongly agree)
I frequently adjust my work schedule to accommodate other employees' requests for time off.
1 (strongly disagree) 2 3 4 5 6 7 (strongly agree)
I always go out of the way to make newer employees feel welcome in the work group.
1 (strongly disagree) 2 3 4 5 6 7 (strongly agree)
I show genuine concern and courtesy toward co-workers, even under the most trying business or personal situation.
1 (strongly disagree) 2 3 4 5 6 7 (strongly agree)


I rarely miss work even when I have a legitimate reason for doing so.
1 (strongly disagree)
2
3
4
5
6
7 (strongly agree)
I perform my duties with unusually few errors.
1 (strongly disagree)
2
3
4
5
6
7 (strongly agree)
I perform my duties with extra-special care.
1 (strongly disagree)
2
3
4
5
6
7 (strongly agree)
I always meet or beat deadlines for completing work.
1 (strongly disagree)
2
3
4
5
6
7 (strongly agree)
You have completed Part 2! Select "Next" to move on to Part 3 of 4.
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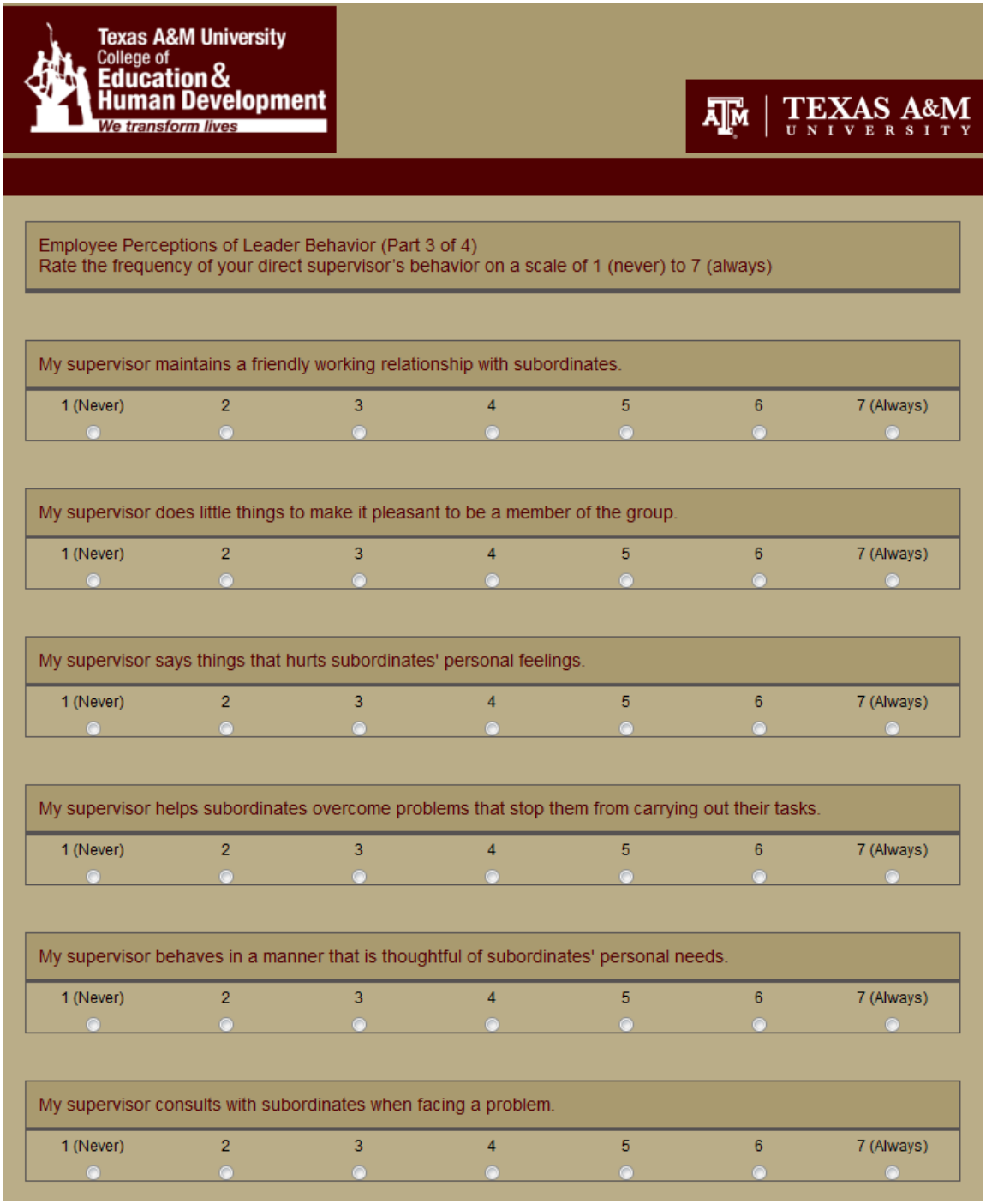
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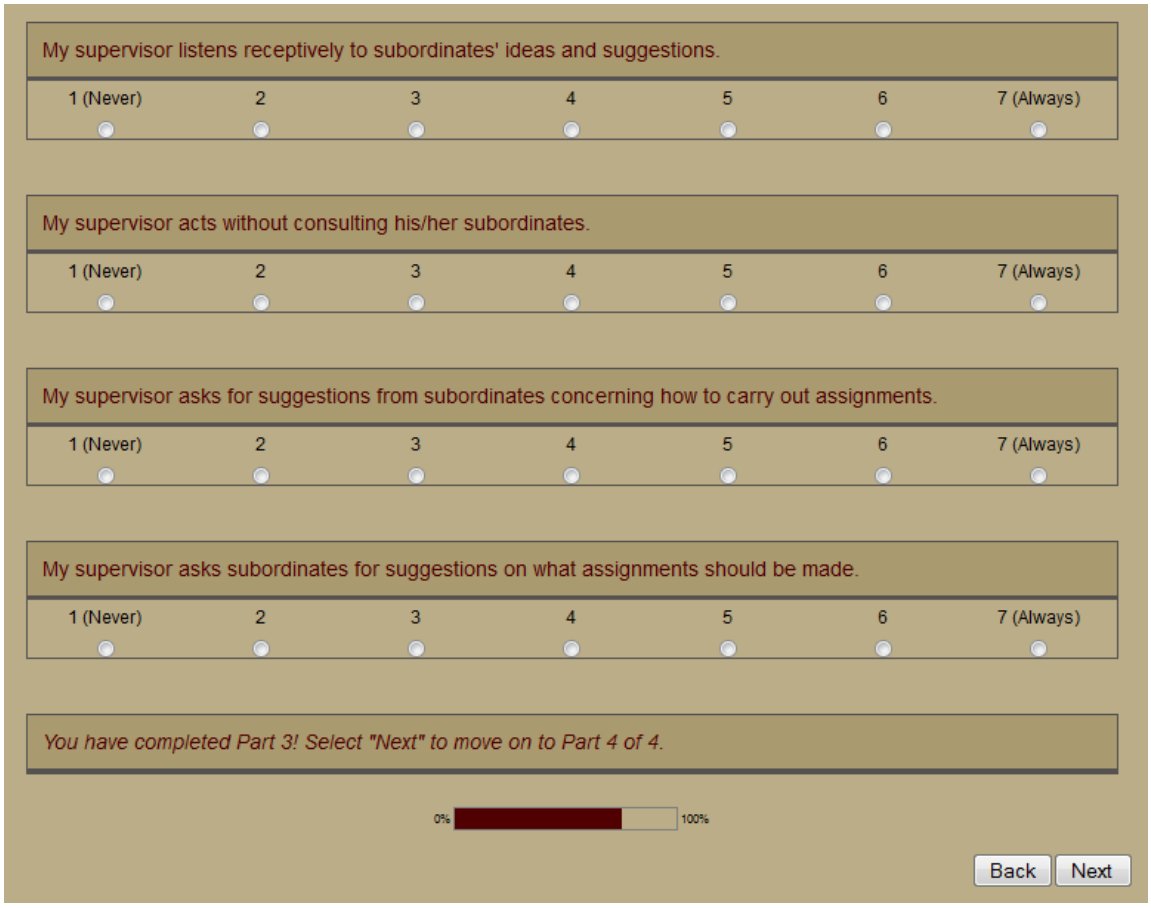
Employee Perceptions of Leader Behavior (Part 3 of 4)
Rate the frequency of your direct supervisor's behavior on a scale of 1 (never) to 7 (always)
My supervisor maintains a friendly working relationship with subordinates.
1 (Never) 2 3 4 5 6 7 (Always)
My supervisor does little things to make it pleasant to be a member of the group.
1 (Never) 2 3 4 5 6 7 (Always)
My supervisor says things that hurts subordinates' personal feelings.
1 (Never) 2 3 4 5 6 7 (Always)
My supervisor helps subordinates overcome problems that stop them from carrying out their tasks.
1 (Never) 2 3 4 5 6 7 (Always)
My supervisor behaves in a manner that is thoughtful of subordinates' personal needs.
1 (Never) 2 3 4 5 6 7 (Always)
My supervisor consults with subordinates when facing a problem.
1 (Never) 2 3 4 5 6 7 (Always)


My supervisor listens receptively to subordinates' ideas and suggestions.
1 (Never) 2 3 4 5 6 7 (Always)
My supervisor acts without consulting his/her subordinates.
1 (Never) 2 3 4 5 6 7 (Always)
My supervisor asks for suggestions from subordinates concerning how to carry out assignments.
1 (Never) 2 3 4 5 6 7 (Always)
My supervisor asks subordinates for suggestions on what assignments should be made.
1 (Never) 2 3 4 5 6 7 (Always)
You have completed Part 3! Select "Next" to move on to Part 4 of 4.
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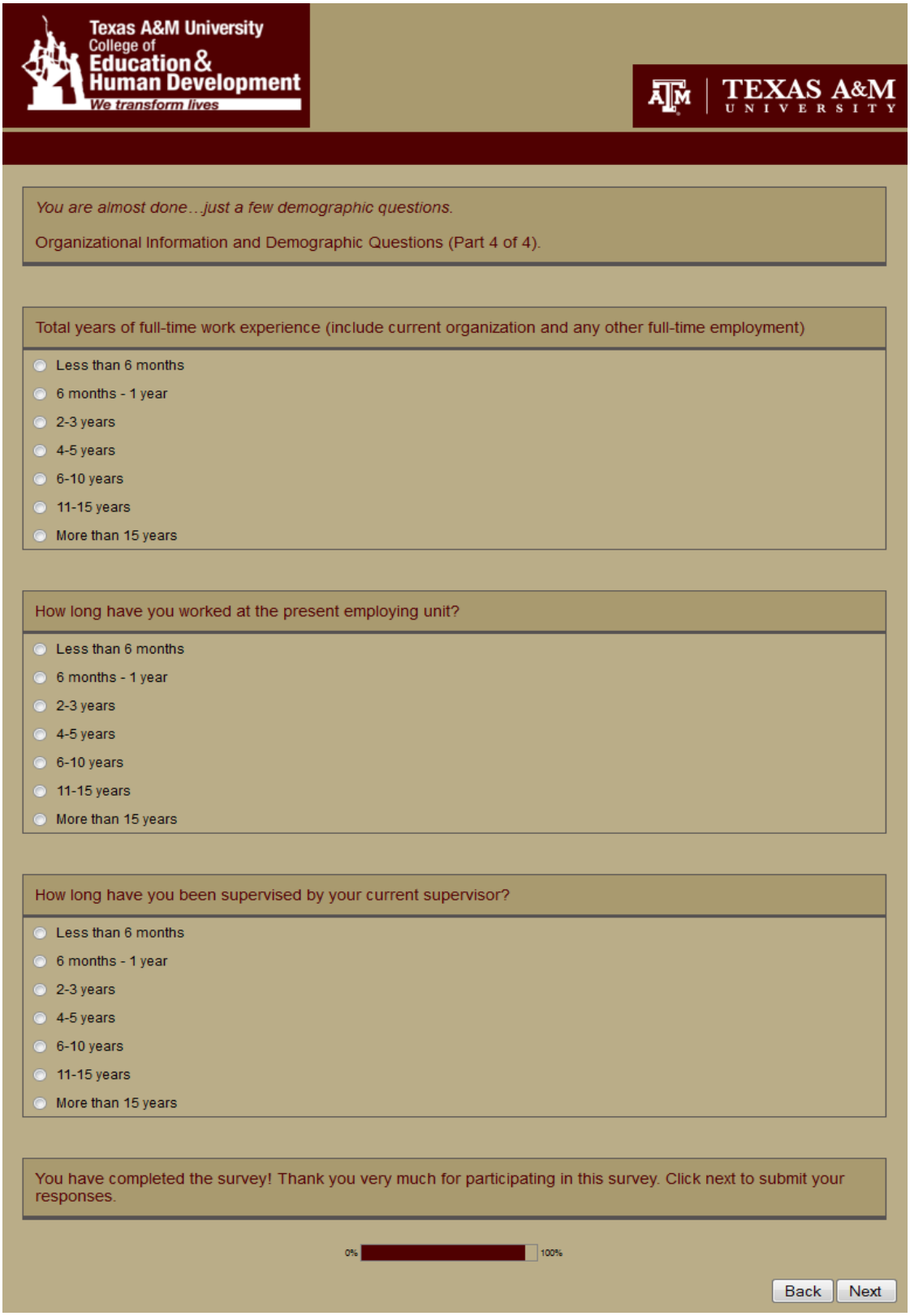
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You are almost done…just a few demographic questions.
Organizational Information and Demographic Questions (Part 4 of 4).
Total years of full-time work experience (include current organization and any other full-time employment)
Less than 6 months
6 months - 1 year
2-3 years
4-5 years
6-10 years
11-15 years
More than 15 years
How long have you worked at the present employing unit?
Less than 6 months
6 months - 1 year
2-3 years
4-5 years
6-10 years
11-15 years
More than 15 years
How long have you been supervised by your current supervisor?
Less than 6 months
6 months - 1 year
2-3 years
4-5 years
6-10 years
11-15 years
More than 15 years
You have completed the survey! Thank you very much for participating in this survey. Click next to submit your responses.
0%
100%
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