

A STUDY OF THE RELATIONSHIP BETWEEN
ASSOCIATE ENGAGEMENT AND TRANSFORMATIONAL LEADERSHIP
IN A LARGE, FAITH-BASED HEALTH SYSTEM

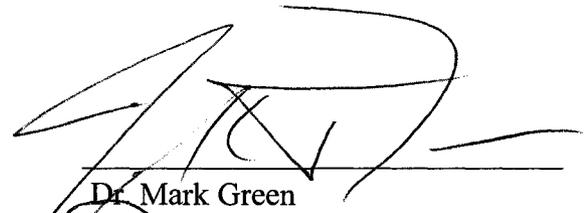
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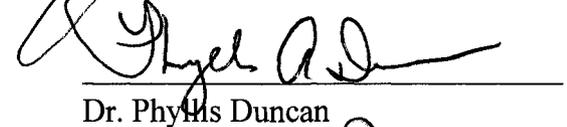
DISSERTATION
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In Partial Fulfillment of the Requirements

For the Degree of
Doctor of Philosophy
In
Leadership Studies

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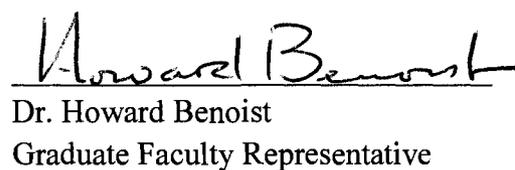
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DEDICATION

I dedicate this to three important heroes in my life; three men who have taught me great lessons of courage, resilience, faith, and fortitude. They are Albert Joseph, Herman Joseph, and Justin Alan. All three have overcome immense obstacles in their lives and have kept persevering despite the hardships. Each one has helped me through many of my own difficult journeys in their individual, unique ways through their love, friendship, support, and absolute belief in my ability to achieve this milestone. I will never forget them. A part of each of them will always live within me.

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And lastly, extraordinary gratitude is expressed to my family. Much appreciation is extended to my mother for helping me study both virtually and even during my infrequent visits home to Spokane. Thanks to my father and Jan, and my sister and brother. My son has watched his mother study all his life. A world of thanks goes to Justin for his tolerance of my having to sacrifice much mother/son time over the years and for his support of my propensity for life-long learning.

God made all this possible and those mentioned above were the sprinkles of seasoning he added along the journey to create an unbeatable combination. Muchas Gracias!

ABSTRACT

Delivering both cost effective and high quality health and wellness care in large and complex organizations requires people who can lead and manage such multifaceted infrastructures, a diverse continuum of human resources, while simultaneously researching and developing strategies to ensure a viable future (Shultz, 1997). Health care workforce shortages are increasing and staff satisfaction is decreasing (Healthcare, 2006). Fostering engagement in employees can reduce turnover and increase patient safety, quality of care, and organizational commitment (Toto & Perkins, 2004). This research examined the relationship between associate engagement and leadership style in a large, faith-based health system located in the United States and Mexico. The Multifactor Leadership Questionnaire (Bass & Avolio, 2004) and the Press Ganey Culture of Engagement Index[®] (Bavin & Coshow, 2007) were administered to 190 CHRISTUS Health associates that were randomly selected from the top and bottom 100 departments from the Fall 2007 Press Ganey Culture of Workplace Engagement Index[®]. The results of this research found that salary, team size, and location were significant predictors in determining whether a respondent worked in an engaged or disengaged department. The results of the data when examined at the individual level found that the significant predictors of engagement were all about the leadership style of the respondent's leader. The higher the transformational score and the lower the passive score, the higher the respondent's engagement with the organization.

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CHAPTER 1

INTRODUCTION

The ability to successfully direct and operate a healthcare organization requires leaders who have the ability to guide a complex and diverse organization. Health care systems are large in size and complexity. Delivering high-tech medical care across a continuum of medical clinics, outpatient services, acute care hospitals, home health, long-term care, assisted living facilities, and a variety of developing settings calls for leaders who can both lead and manage such complex infrastructures, a wide range of human resources, and all of this while developing strategies focused on building services to survive in the future (Sultz, 1997).

In a 2007 survey conducted by the American College of Healthcare Executives (2008), 70% of the hospital CEO's who responded reported financial challenges as one of their top three concerns. Increasing costs for staff was mentioned as one of the elements of the highest contributors to financial challenges. Reducing staff turnover by increasing employee satisfaction can have a positive impact on finances.

Current and predicted workforce shortages in health care create another business reason to retain current staff. According to the American Hospital Association (Healthcare, 2006), hospital staffing vacancy rates in 2005 were as follows: Registered nurses, 8.5%; Nursing assistants, 7.6%; Licensed practical nurses, 7.3%; Laboratory technicians, 6.3%; and Imaging technicians, 5.9. The same survey reported a decrease in staff satisfaction by 52%.

In addition to addressing the financial implications of staff turnover, even more important reasons to engage a health system workforce exist: patient safety and quality

of care. According to a Gallup study (Toto & Perkins, 2004), hospitals with a higher nurse engagement level have lower mortality and complication rates. Gallup also studied hospital acquired infection rates in health care institutions. Units with employees who were less engaged experienced infection rates 18 times higher than units with higher employee engagement. Patients on these units were also 54 times more likely to develop surgical-site infections. Gallup also found that engaged employees are more likely to follow agreed upon protocols and use technology that has been designed to improve both quality and safety. Leaders who can create a work environment where staff is satisfied and engaged are not only more effective leaders, but they also contribute to a safer environment for staff and for the patients whose lives are entrusted to a healthcare organization.

Engagement

An employee's satisfaction with the leader is one of many methods to evaluate the effectiveness of the leader and the willingness of followers to assist leaders in meeting organizational goals. Measuring employee satisfaction requires assessing employee feelings, beliefs, and observations along several dimensions. A few such examples of measurements of employee satisfaction include productivity level, number of grievances, number of department transfers, voluntary turnover rate, and level of misuse of equipment and supplies (Yukl, 2004).

A newer model of measuring a follower's willingness to help an organization achieve objectives and the effectiveness of a leader is to examine the concept of employee engagement. Engagement is the extent to which individuals are "psychologically present during particular moments of role performance" (Kahn, 1990, p.

692). Kahn further states that employee engagement has three components: meaningfulness, safety, and availability.

The first component of engagement, meaningfulness, is described as doing work that makes a difference and feeling valued and useful (Kahn, 1990). Meaningfulness is the return on the investments one feels he or she receives based upon the amount of physical, cognitive, or emotional energy obtained from the person's work. Task characteristics contribute to meaningfulness. When one does work that is "challenging, clearly delineated, varied, creative, and somewhat autonomous" (Kahn, 1990, p. 704), a person will experience meaningfulness. Role characteristics also contribute to meaningfulness. Role characteristics are defined as the identity, status, and influence a role carries and those associated with the role. The final component of meaningfulness is work interactions. Working with co-workers and clients that stimulate and create rewarding interpersonal relationships provides a valuable basis for meaningfulness.

The second dimension of engagement is safety. Safety relates to the employee's feeling that the leader in a specific situation is trustworthy and that the situation itself is secure and predictable (Kahn, 1990). Interpersonal relations contribute to safety when the relationships are supportive and can be trusted. People feel more safe if they can fail at work and be encouraged, rather than experience negative consequences. Positive group and inter-group dynamics, such as activities that decrease gender differences, authority, and competition increase safety. Safety is also increased by management style and process. Leaders who are supportive, resilient, and clarify expectations positively impact safety. Organizational norms, which are the shared expectations about the behavior of

organizational members, also impact safety. People who behave in a manner consistent with organizational norms feel safer than those who do not.

The final component of engagement, availability, is defined as the capability to drive physical, intellectual, and emotional energy into one's work (Kahn, 1990).

Disengaged people do not feel energy, strength, and readiness while performing work, where as engaged people do. Engaging work can, at times, be emotionally taxing.

Workers who can tap into emotional resources increase their personal engagement.

Availability is also derived from security. People who can express themselves in a situation are generally secure about their self-image.

Outside life also contributes to availability. Certain events outside of work can take workers psychologically away from their work roles and decrease engagement. For instance, financial hardship or the death of a loved one will decrease availability. Outside work, however, such as volunteering, can increase engagement, as can the attainment of a personal goal.

May, Gilson, and Harter (2004) have built upon Kahn's engagement research. These researchers further investigated the cognitive, emotional, and physical components of engagement. Leadership implications of their study indicate that supportive supervisor relations are the greatest predictors of high engagement. Components of a supportive supervisor relationship include assistance with problem solving and skill development, encouragement to participate in decision-making, the ability to have candid conversations without fear of reprisal, and exhibiting fairness, integrity, and trust.

Developmental Dimensions International (DDI), a large, international human resources research and consulting company, defines employee engagement as occurring

when employees perform their duties with passion, commitment and go above and beyond required duties (Wellins & Concelman, 2005). According to DDI, engaged employees perform at a higher level than disengaged employees. DDI also reports that companies with high-growth have employee engagement scores 20 percent higher than low-growth companies. DDI's research reports that individual business units with engaged employees within an organization have fewer quality complaints and lower employee turnover.

Hewitt Associates, an international human resources outsourcing and consulting firm, provides one argument why employers have moved from measuring employee satisfaction to measuring engagement. Satisfaction is defined as a measurement of "how people like it here" (Baumruk, 2006, p. 24). Engagement is defined as a measurement of behaviors that positively impact organizational results. Hewitt defines these behaviors attributed to engaged employees as say, stay, and strive. "Say" is the employee advocating the organization to all stakeholders. "Stay" is the desire of the employee to remain with the organization despite offers to work somewhere else. "Strive" is the extra effort, time, and initiative an employee contributes that assists the organization in achieving success. Success is defined as lower employee turnover, higher productivity, and better results (Baumruk, 2006).

Leadership

As previously discussed, effective leaders create cultures in which employees are engaged. Leadership has numerous definitions and descriptions. A search on the term "leadership" in scholarly journals returned over 250,000 articles on the subject. Bennis (2003) states "leadership is like beauty: it's hard to find, but you know it when you see it"

(Bennis, 2003, p. xxvi). Bennis further asserts that leadership is important to organizational effectiveness. Burns (1979) describes leadership as an action that engages people at all levels of society.

According to Yukl (2004), “leadership is the process of influencing others to accomplish organizational goals” (p. 7). Northouse (2004) also describes leadership as a process “whereby an individual influences a group of individuals to achieve a common goal” (p. 3). The capability of an organization to achieve goals is, therefore, partly driven by leaders who actively engage their followers and create an environment in which followers are self-motivated to assist the leader with meeting or exceeding business objectives.

The Full Range Model of Leadership

The dimensions that define leadership are many. Northouse (2004) reports that at least 65 different classification systems exist to describe leadership characteristics. These classifications include personality, behavior, group process, skills, abilities, and competencies.

James MacGregor Burns (1978), in his book *Leadership*, made the distinction between two types of leadership: transactional and transforming. Burns defines a transactional leader as one who focuses on exchanging one transaction for another with followers, such as votes for jobs. Transforming leadership occurs when a leader becomes aware of follower potential and needs and uses that knowledge to move the follower to higher level needs. A transforming leader engages the whole being of a follower. Burns (1978) states that the result of transforming leadership is mutual motivation and the conversion of followers into leaders.

Concurrent with the time of Burns describing transforming leadership, House described a theory of charismatic leadership (Northouse, 2004). Northouse wrote that transformational and charismatic leadership were synonymous. House saw charismatic leadership as a personality trait. He described the traits as “being dominant, having a strong desire to influence others, being self-confident, and having a strong sense of one’s own moral values” (Northouse, p. 171). Transforming and charismatic leaders also role modeled values they wanted their followers to embrace by displaying the behaviors themselves.

Building on Burns and House’s concept of transforming leadership, Bernard Bass developed a formal theory of transformational leadership (Bass, 1985). Bass theorized that transformational and transactional leadership were part of a single continuum, not mutually exclusive. Bass developed a model that provided a continuum of behaviors that ranged from the least effective style, laissez faire, to the most effective style, idealized (charismatic) leadership (Bass & Avolio, 2004). The full range of leadership behaviors were comprised of the factors of transformational leadership, transactional leadership, and laissez-faire, or non-leadership. Bass and Avolio (2004) refined the factors of the full range leadership model and the current elements of each factor are illustrated in Figure 1.

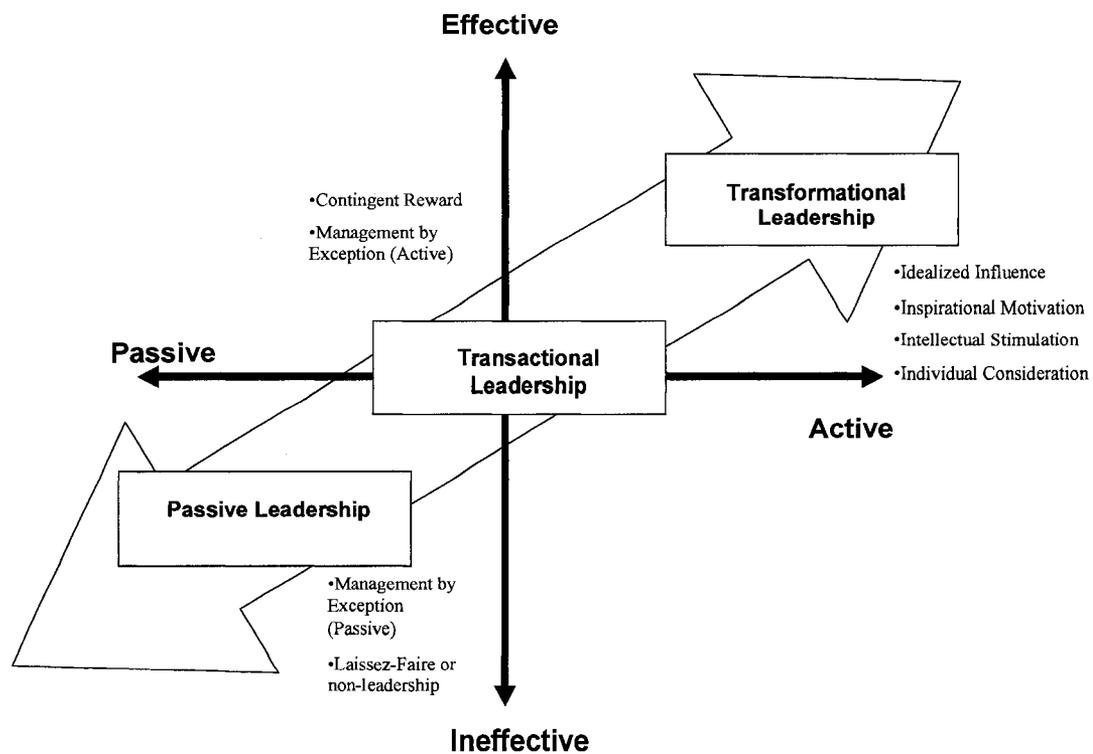


Figure 1. Factors of the Full Range Leadership Model.

According to Bass and Avolio (2004), “transformational leadership is a process of influencing in which leaders change their associates awareness of what is important, and move them to see themselves and the opportunities and challenges of their environment in a new way” (p. 96). Transformational leaders proactively seek to go beyond performance expectations.

The first component of transformational leadership is idealized influence. It describes leaders who are respected, admired and trusted by their followers. Followers can identify with the leader and emulate the leader’s behaviors. The morals and values of the leader are consistent with the leader’s conduct (Bass & Avolio, 2004).

The second component of transformational leadership is inspirational motivation. Leaders provide meaning and challenge to the work of followers and create both individual and team spirit. The leader is optimistic and enthusiastic and encourages followers to envision a positive future (Bass & Avolio, 2004).

The third component of transformational leadership is intellectual stimulation. Leaders displaying these behaviors encourage innovation and creativity in their followers through the questioning of assumptions and the ability to reframe problems. Mistakes are not criticized and followers are included in problem resolution (Bass & Avolio, 2004).

Individual consideration is the fourth component of transformational leadership. It describes a leader who is a coach and mentor to followers and one who pays attention to the individual needs each follower has for achievement and growth. The leader develops the potential of followers through new learning opportunities and an encouraging and supportive environment (Bass & Avolio, 2004).

Transactional leaders define expectations and reward or correction based on achievement of performance. Transactional leadership is comprised of two styles, contingent reward and management-by-exception: active (MBEA) (Bass & Avolio, 2004).

Contingent reward leaders clarify expectations and base recognition and rewards when the goals are achieved. This behavior results in followers who achieve expected levels of performance (Bass & Avolio, 2004).

Management-by-Exception: Active (MBEA) leaders also specify expectations and standards for compliance. These leaders also define ineffective performance and penalize followers who do not meet standards. These types of leaders closely monitor work for

errors and mistakes and then take quick action to correct the deviation (Bass & Avolio, 2004).

Passive behavior, previously termed Laissez-Faire and non-leadership, is another form of management-by-exception leadership. This type of leadership is passive and reactive as the leader avoids setting expectations or standards. Both followers and desired outcomes are negatively impacted.

The first of two components of passive leadership is Management-by-Exception: Passive (MBEP). Leaders do not intervene until problems become serious. Laissez-Faire leadership is the second component of passive leadership. Behaviors associated with this component include a leader who does not make decisions, is slow to responding to urgent questions, and is absent when needed (Bass & Avolio, 2004).

The Multifactor Leadership Questionnaire (MLQ) is the most commonly used instrument to measure transformational, transactional, and passive leadership. The MLQ has evolved over the 25 years of its existence and the most recent version is the Form 5X. In addition to measuring the full range of leadership behaviors, the MLQ measures the outcomes of leadership: extra effort, effectiveness, and satisfaction with leader (Bass & Avolio, 2004).

Problem Statement

In large, complex healthcare organizations, leaders who can foster an environment in which followers feel meaningfulness, safety, and availability in their roles will create an organizational environment that encourages innovation, creativity, and change (Kahn, 1992, Bass & Avolio, 2004). What type of leader, though, promotes engaged followers? Typically, a leader with transformational characteristics is able to motivate followers to

perform to higher levels than a leader who leads with a transactional leadership style (Bass & Avolio, 1994). Transformational leadership augments transactional leadership behaviors and is attributed to followers contributing extra effort and performance (Bass, 1998).

According to Hewitt's research, key predictors of engagement are relationships, total rewards, opportunities, quality of work-life, people practices, and the actual work itself (Gorman, 2006). Hewitt does, however, state that an employee's direct supervisor can influence all of the components previously listed. Hewitt specifically attributes the degree to which a supervisor provides coaching and career support, recognition, and holds individuals and teams accountable as core areas that improve employee engagement.

If engagement is an important component of organizational effectiveness and the degree of employee engagement can be impacted by leaders, how can organizations recruit, hire, and develop leaders who contribute to a highly engaged workforce? Are there differences in how much followers are engaged and in how they perceive their leader? The answers to these questions will provide organizations with clearer direction in looking for specific leadership characteristics predictive of employee engagement when selecting, educating, and promoting leaders.

A study that examines the relationship between the leadership style of leaders with varying degrees of an engaged workforce in their business units can provide both a descriptive and prescriptive approach to leadership. First, the results and findings derived from the study can be used to describe attributes of effective leaders. Secondly, the

results of the study can prescribe characteristics one should strive for in order to improve leadership effectiveness and to increase the engagement of followers.

In addition, studies of the effects of transformational leadership have been conducted in a variety of areas. A 2004 meta-analysis (Judge & Piccolo) showed that studies related to transformational leadership had been conducted in environments such as the military, education, and business. The meta-analysis did not show where a study had been conducted in a healthcare setting. A search of Dissertation abstracts showed 35 dissertations related to transformational leadership and healthcare have been conducted since 1989, with seven of those dissertations having employee satisfaction or commitment as a variable. There were no dissertations with engagement as a variable. This study adds to the field of research in healthcare and provides a first look of the effects of transformational leadership specific to employee engagement.

Purpose of Study

This study examines the relationship among transformational, transactional, and passive leadership style and follower engagement levels. The results of this study may help organizations with their recruitment and development strategies for current and future leaders. This study may also help leaders realize the importance of their own leadership behaviors on follower engagement and organizational effectiveness.

Conceptual Definitions

Engagement

Engagement is defined as the extent to which organizational members harness themselves to their work roles by being psychologically present during particular moments of role performance (Kahn, 1990).

Transformational Leadership

Transformational leadership is defined as the four subscales that comprise the transformational factor of the full range leadership model (Bass & Avolio, 2004).

1. Idealized influence describes leaders who are respected, admired and trusted by their followers. Followers can identify with the leader and emulate the leader's behaviors. The morals and values of the leader are consistent with the leader's conduct.
2. Inspirational motivation describes leaders who provide meaning and challenge to the work of followers and a spirit of individual and team spirit. The leader is optimistic and enthusiastic and encourages followers to envision a positive future
3. Intellectual stimulation describes leaders who display behaviors that encourage innovation and creativity in their followers through the questioning of assumptions and the ability to reframe problems. Mistakes are not criticized and followers are included in problem resolution.
4. Individualized consideration describes leaders who act as a coach and mentor to followers by paying attention to the individual needs each follower has for achievement and growth. The leader develops the potential of followers through new learning opportunities and an encouraging and supportive environment.

Transactional Leadership

Transactional leadership is defined as the two subscales that comprise the transactional factor of the full range leadership model. (Bass & Avolio, 2004)

1. Contingent reward describes leaders who clarify expectations and base recognition and rewards when the goals are achieved. This behavior results in followers who achieve expected levels of performance.
2. Management-by-Exception: Active (MBEA) describes leaders who also specify expectations and standards for compliance. These leaders also define ineffective performance and penalize followers who do not meet standards. These types of leaders closely monitor work for errors and mistakes and then take quick action to correct the deviation.

Passive Leadership

Passive leadership is defined as the two subscales that comprise the passive factor of the full range leadership model. (Bass & Avolio, 2004)

1. Management-by-Exception: Passive (MBEP) describes leaders who do not intervene until problems become serious.
2. Laissez-Faire leadership describes a leader who does not make decisions, is slow to respond to urgent questions, and is absent when needed.

Research Questions

Research Area One – Instrument Analysis

1. Is there a difference between the factor structure of the Press Ganey Culture of Engagement Index[®] and the Multifactor Leadership Questionnaire?

Research Area Two – Department Level Research

2. Is there a relationship between department engagement index (score) and leader transformational scores when controlling for follower age, gender, ethnicity,

education, location, tenure with the organization, tenure with the leader, department type, team size, and salary?

3. Is there a relationship between department engagement index and leader transactional scores when controlling for follower age, gender, ethnicity, education, location, tenure with the organization, tenure with the leader, department type, team size, and salary?
4. Is there a relationship between department engagement index and leader passive scores when controlling for follower age, gender, ethnicity, education, location, tenure with the organization, tenure with the leader, department type, team size, and salary?

Research Area Three – Individual Level Research

5. Is there a relationship between follower engagement index and their perception of leader's transformational score when controlling for follower age, gender, ethnicity, education, location, tenure with the organization, tenure with the leader, department type, team size, and salary?
6. Is there a relationship between follower engagement index and their perception of leader's transactional score when controlling for follower age, gender, ethnicity, education, location, tenure with the organization, tenure with the leader, department type, team size, and salary?
7. Is there a relationship between follower engagement index and their perception of leader's passive score when controlling for follower age, gender, ethnicity, education, location, tenure with the organization, tenure with the leader, department type, team size, and salary?

Assumptions

The following assumptions were included in this study: the instruments employed can provide reliable and valid measures of followers' perceptions of their leaders' leadership style and the followers' level of engagement with the organization. The final assumption is that participants in the study will report their perceptions and answer the instruments honestly and according to directions provided in the research study packet.

CHAPTER TWO

REVIEW OF THE LITERATURE

Introduction

This study examined the relationship between followers' ratings of their leader's leadership styles and followers' self ratings of their engagement level in a large, faith-based healthcare system. Of the 2,378 scholarly studies and 203 dissertations on transformational leadership that were researched, no scholarly studies were found that examined the relationship between leadership style and follower engagement. Follower engagement at work can vary day to day, however, the culture of an organization is much more stable. Due to the lack of scholarly research on engagement, studies measuring perceived organizational support, organizational commitment, organizational citizenship behavior, job satisfaction or other measures of organizational satisfaction were used as proxies for engagement.

The chapter begins with a review of the historical research on the dependent variable of employee engagement, followed by research germane to the relationship between engagement and the control variables of follower age, gender, ethnicity, education, geographic location, tenure with the organization, tenure with the leader, department type, team size, and salary. The research then focuses on a review of the literature related the independent variables, starting with studies related to the full range leadership model comprised of transformational, transactional, and passive/avoidant leadership. The chapter then examines research related to the control variables of follower age, gender, ethnicity, education, geographic location, tenure with the organization, tenure with the leader, department type, team size, and salary as they relate

to leadership style. At the conclusion of the chapter, expected outcomes of the study are presented.

Engagement

The seminal study about the conceptual framework of engagement was conducted by Kahn in 1990. Kahn believed that people brought varying degrees of their self to the workplace. Elements of one's self brought to the work role included a physical, emotional, and cognitive component. Kahn posited that people experienced moments when they brought themselves in or removed themselves from particular task behaviors on the job. Kahn sought to identify the variables that explained how people perceived their selves-in-roles, their work, and the relationship of the two.

Kahn used two different samples for his study (1990). The first sample consisted of 16 counselors at Camp Carrib in the West Indies. There were 9 men and 7 women, and the mean age was 25.5 years. Average tenure at the camp as a counselor was 2.5 years. The second study consisted of 16 firm members from an architecture firm in the Northeastern United States. The sample consisted of 10 men and 6 women and the mean age was 34.3 years. Average tenure with the firm was 5.8 years. Data for both studies were collected through qualitative methods of observation, document analysis, self-reflection, and in-depth face-to-face interviews.

Kahn described the theoretical framework for his study by defining personal engagement and personal disengagement. Personal engagement was defined as bringing a person's preferred self (physical, cognitive, and emotional) to a role without sacrificing either one (Kahn, 1990). Kahn described personal disengagement as both the withdrawal

and the defending of one's preferred self so that physical, cognitive, and emotional connects are absent in the tasks of the work.

Results of the study showed that there was a significant, positive correlation between psychological meaningfulness (task characteristics, role characteristics, and work interactions) and personal engagement ($r = .89, p < .05$). Psychological safety (interpersonal relationships, group and inter-group dynamics, management style and process, and organizational norms) was also found to have a significant, positive correlation to higher levels of personal engagement ($r = .83, p < .05$). Although statistics were not provided for the individual psychological safety factors, the study reported supportive leader behaviors such as consistency and trust were contributors to personal engagement (Kahn, 1990). Psychological availability (physical energy, emotional energy, security, and outside life) was also found to have a significant, positive correlation with personal engagement ($r = .81, p < .05$).

May, Gilson, and Harter (2004) conducted a study to build on Khan's 1990 conceptual model of engagement. Participants in the study were employees and managers in the administrative division of a mid-western large insurance firm in the United States. A survey was administered to 213 employees and the survey measured participants' perceptions about themselves, their jobs, their supervisors, and their co-workers. Factor analysis was conducted with oblique rotation, with loadings of .40 used as the cut-off point for cross-loadings. There were 14 factors with eigenvalues greater than 1.00. The factors with the greatest contribution to variance (23.9%) consisted of all the items related to Supervisor Relations: Engagement ($r = .45, p < .05$), Meaningfulness ($r = .39, p < .05$), Safety ($r = .55, p < .05$), Availability ($r = .41, p < .05$), Job Enrichment ($r = .42, p$

< .05), and Work Role Fit ($r = .48, p < .05$). This study emphasized the importance of leader behavior in fostering employee engagement, specifically how jobs are designed, employees are selected, and in how a supervisor relates with his or her employee.

Salanova, Agut, and Peiro (2005) conducted a study examining the relationship of organizational resources and work engagement to employee performance and customer loyalty. The study consisted of a sample of 342 restaurant and hotel employees. The mean age of the participants was 34.2 years, 54.2% were men and 45.8% women. The researchers administered the Organizational Resource Scale, the Work Engagement Scale, three items from the SERVQUAL Empathy Scale, and three items from the Service Provider Performance Scale. Customer loyalty was measured using three items measuring likelihood to return and positive word-of-mouth behaviors. The customer sample was comprised of 1,140 customers from the restaurant and hotel units.

Results of the study indicated organizational resources (training, autonomy, and technology) had a positive relationship to engagement (vigor, dedication, and absorption). Vigor had a significant, positive relationship with training ($r = .22, p < .001$), autonomy ($r = .13, p < .10$) and technology ($r = .24, p < .001$). Dedication had a significant, positive relation to training ($r = .43, p < .001$), autonomy ($r = .32, p < .001$), and technology ($r = .43, p < .001$). Absorption had a significant positive relation to training ($r = .22, p < .001$) and technology ($r = .24, p < .001$). Performance feedback, supervisor support, and job control contribute to organizational resources (Salanova, Agut, & Peiro, 2005). These elements are heavily influenced by the leader of the unit. As such, supervisors and leaders have a great degree of influence over the engagement of employees in the workplace.

Johnstone and Johnston (2005) conducted a study related to organizational climate, occupational type, and workaholism. Participants of the study included 151 business services and social services employees. Participants completed the Work Environment Scale that measured the subscales of co-worker cohesion, supervisor support, work pressure, and involvement as they relate to drive and enjoyment. The only significant correlation with drive was that of work pressure ($r = .21, p < .05$). There were significant, positive correlations with enjoyment and involvement ($r = .25, p < .01$), co-worker cohesion ($r = .32, p < .01$), and supervisor support ($r = .30, p < .01$). There was a significant, negative correlation between enjoyment and work pressure ($r = -.17, p < .05$). Work environments high in involvement, co-worker cohesion and supervisor support and low in work pressure were enjoyed more by employees. This study supports the importance of a leader who can foster a work environment with these conditions.

In a 1990 study, Eisenberger, Fasolo, and Davis-LaMastro examined the relationship between perceived support and expressed affective attachment and performance-reward expectancies. The sample consisted of 422 hourly employees and 109 managerial employees. The respondents completed the Survey of Perceived Organization Support and answered open ended questions about suggestions for “ways management can be kept better informed of your ideas for small or large changes that will improve productivity” (Eisenberger, Fasolo, & Davis-LaMastro, 1990).

Results indicated that both hourly and managerial employees who perceived a higher support from the organization provided more constructive, innovative answers to improve the organization $t(128) = 2.97, p < .005$, and $t(34) = 2.46, p < .01$. Leaders

who foster a culture of support are more able to solicit ideas for improvement from employees and create engagement.

Laschinger & Finegan (2005) conducted a study to test the model relating structural empowerment to 6 areas of worklife purported to be antecedents of work engagement. The researchers hypothesized work engagement fostered low burnout levels and physical and mental health. The study consisted of 285 respondents who were nurses in Ontario. The nurses completed the Conditions of Work Effectiveness Questionnaire-II that measures access to opportunity, information, support, resources, informal power, and formal power. The respondents also completed an adapted instrument to measure worklife that consisted of scales for workload, autonomy/control, reward, fairness, community, and value congruence. Additionally, the respondents completed the Maslach Burnout Inventory-General Survey to assess emotional exhaustion, and three scales from the Pressure Management Indicator to measure physical and mental health outcomes. The three scales were energy level, physical symptoms, and depressive state of mind pressure.

Structural equation modeling techniques were used to analyze the results. Results of the study indicated that structural empowerment had a significant, positive effect on 5 of the 6 scales of worklife: control, ($\beta = .31, p < .05$), workload ($\beta = -.31, p < .05$), fairness ($\beta = .42, p < .05$), reward ($\beta = .49, p < .05$), community ($\beta = .25, p < .05$). The empowerment/value congruence path was not significant ($p > .05$). This study highlights the significance of a work culture that fosters empowerment to optimize engagement.

Shanock and Eisenberger (2006) conducted a study examining the relationship between supervisors' perceived organizational support (POS) with followers perceptions of support from the supervisor (PSS). The researchers hypothesized that PSS would be

positively related to how a follower performed both within the confines of a work role and in going beyond expectations (extra role performance).

Participants for the study were 231 employees of a large discount electronics store from the Northeastern United States. The participants completed the short form of the Survey of Perceived Organizational Support. Supervisors of the participants ($N = 71$) completed performance ratings of all participants. Additionally, the supervisors completed the short form of the Survey of Perceived Organizational Support. Perceived supervisor support was measured with the same six items from the Survey of Perceived Organization Support, replacing the word *organization* with the word *supervisor*.

Results of the study indicated PSS had a significant, positive relationship with in-role performance ($r = .21, p < .05$) and extra-role performance ($r = .19, p < .05$). Follower POS had a significant, positive relationship with PSS ($r = .50, p < .01$). The results suggest the degree to which a supervisor demonstrates supportive acts such as positive feedback, coaching and inclusion in decision making (Shanock & Eisenberger, 2006) influence the effort and performance of followers.

Wright, Cropanzano, and Bonett (2007) examined the relationship between psychological well-being, job satisfaction, and job performance. The Index of Psychological Well-Being was used to assess psychological well-being. Job satisfaction was used measuring three highly recognized dimensions of job satisfaction: satisfaction with work, satisfaction with coworkers, and satisfaction with supervisor. Job performance was measured by annual ratings from annual performance reviews for the 109 managers who participated in the study.

Consistent with other research (Judge et al. 2001), job satisfaction had a significant, positive relationship with job performance ($r = .36, p < .01$). The individual items of job satisfaction also had a significant correlation with performance: satisfaction with work ($r = .35, p < .01$), satisfaction with coworkers ($r = .28, p < .01$), and satisfaction with supervisor ($r = .25, p < .01$). This research further supports the importance of the leader/follower relationship.

Burke (2005) studied the effects of hospital restructuring and downsizing on how nurses perceived the hospital was functioning. One measure included seven items from the Survey of Perceived Organizational Support. Regression analysis showed nurses who rated higher levels of hospital support reported a significant, positive relationship with perceptions of their unit and hospital functioning as measured by: impact on facilities ($R = .46, p < .001$), errors/injuries ($R = .34, p < .001$), patient care ($R = .50, p < .001$), inadequate time for patients ($R = .58, p < .001$), quality service culture ($R = .42, p < .001$), and coordination ($R = .41, p < .001$). The study emphasizes the importance of leaders creating desirable restructuring processes in order to increase work satisfaction, psychological well being of the nurses, and perceptions of effectiveness of the hospital.

A study of 927 employees from high-technology companies in Taiwan (Cheung, 2000) examined the relationship between organizational commitment and organizational support. The participants were 50.4% female and 48.7% male. The researcher used a 15 item measure for commitment to the organization and a ten item measure for organizational support. The study showed a significant, positive correlation between the reciprocal causal paths between organizational commitment ($r = .76, p < .05$), and organizational support ($r = .94, p < .05$). The study implies leaders have a great influence

related to the commitment of followers by ensuring a supportive culture where leaders encourage, inform, listen, articulate clear goals, and provide good working conditions (Cheung, 2000).

Clugston (2000) administered a 12-item job satisfaction, a 15-item bases of commitment, and a three-item intent to leave survey to 175 participants from a governmental agency in the west. Clugston used a three-component model of commitment. Affective commitment refers to the attitude of a follower as he or she thinks of their relationship with the organization and how personal and organizational values and goals are aligned. Continuance commitment was defined as the desire to stay with an organization based on the cost to leave. Normative commitment referred to a follower's desire to stay with an organization because of a moral obligation, a sense of duty, and a feeling of loyalty.

Clugston used structural equation modeling to measure the mediating effects of affective, continuance, and normative commitment on the correlation between job satisfaction and the intent to leave an organization. Results of the study indicated the partially mediated model was the best fit for the data ($X^2 = 14.8, p < .00$). The model added a path from job satisfaction to intent to leave ($R = -.87, p < .00$). Job satisfaction was positively correlated with affective ($r = .82, p < .01$) and normative commitment ($r = .22, p < .05$). Job satisfaction had a negative, significant relationship to intent to leave ($r = -.87, p < .00$). The job satisfaction scale used in the study measured satisfaction with pay, promotion, supervision, work, and co-workers. The results of Clugston's study emphasized the criticality of an effective supervisor in mitigating the desire of a follower to leave an organization.

In 2008, Chughtai conducted a study examining the impact of job involvement on in-role job performance and organizational commitment. The sample for the study included 195 full time faculty members teaching in universities that were located in 5 major cities in Pakistan. The respondents were 64% male and 36% female. Average age of respondents was 39 and average job tenure was 9 years. The Organizational Commitment Questionnaire (OCQ) was used to measure organizational commitment. Job involvement was measured using 12 items from the Job Involvement Scale, in-role performance was measured using a self-appraisal form developed by the researcher, and organizational citizenship behavior was measured using 13 items from the Chinese Citizenship Behavior Scale. Age and gender were used as control variables.

Results of the research study indicated a significant, positive relationship between job involvement and in-role performance ($r = .30, p < .01$). Job involvement was also significantly correlated with organizational citizenship behavior ($r = .43, p < .01$). The study emphasizes the importance of job involvement as a mediator of job performance. Effective leaders understand that followers need to identify with their work experience and know how to create an environment where participative decision-making is encouraged.

Zimmerman, Williams, Reed, Boustani, Heck, and Sloan (2005) conducted a study to examine the relationship between satisfaction of staff who provided care to long-term care residents with dementia. Staff satisfaction was measured using 21 items assessing satisfaction from the Staff Satisfaction Working With Demented Residents. The instrument measured six subscales of satisfaction, including feedback, the care

organization, one's own experience, patient contact, expectations of others, and the environment.

General linear regression was used to analyze the results of the 154 direct care providers who responded. Significant, positive correlations were found between person-centered care and satisfaction ($r = .28, p < .01$) and between stress with coworkers, supervisors workload, physical design, and satisfaction ($r = -.20$ to $-.27; p < .01$). A significant, negative correlation was found between satisfaction and stress ($r = -.24, p < .01$). A significant, positive correlation was found between staff feeling more trained and satisfaction ($r = .58$ and $.56, p < .0001$). This study emphasizes the impact leaders have on frontline caregivers in healthcare institutions and how supervisors need to assess employee stress and the delivery of care model to fully engage workers. The study also reflects the importance of supervisors offering adequate training to workers.

Burris, Detert, and Chiaburu (2008) examined the relationship between psychological attachment and detachment on voice. Employees who go the extra mile in their organizations must be able to express ideas and challenge the status quo. The researchers studied mechanisms that encouraged or dissuaded upward, improvement-oriented voice. The data for the research study were collected from 269 restaurants across the United States that were part of a corporately-owned national chain. The sample for the study consisted of 499 managers who supervised crew members and operational functions and 234 general managers who supervised the managers. The managers were administered five items from the Leader-Member Exchange Scale, five items that measured affective commitment, three items that measured intention to leave, and three items from the Prosocial Voice Scale.

Multiple regression was used and the following results were found. Detachment (intention to leave) was negatively related to voice ($r = -.22, p < .01$). Leader-member exchange had a significant, negative correlation with abusive supervision ($r = -.55, p < .01$), attachment (affective commitment) ($r = -.27, p < .01$), detachment (intention to leave) ($r = -.30, p < .01$), and voice as rated by the general manager ($r = .25, p < .01$).

This study shows that employees who feel safe to voice recommendations for improvement or opinions that challenge the status quo have lower detachment (intention to leave). Employees who perceive a stronger relationship with their leader see the supervisor as less abusive, remain more committed to the organization, have less intention to leave, and feel their voice is heard. All afore mentioned characteristics are related to the workplace environment created by the leader, as well as the leader's leadership style.

Tsai and Huang (2008) conducted a study in Taiwan sampling nurses in nine hospitals to examine the types of ethical climates existing in hospitals and the degree of nurse job satisfaction and organizational commitment. Fifty questionnaires were sent to each of the hospitals and 352 were completed and returned for a 78% response rate. The Ethical Climate Questionnaire, the Job Satisfaction Questionnaire and the Organizational Commitment Questionnaire were used as the instruments for the study. The five factors of the Ethical Climate Questionnaire were caring (benevolence, concern for others), independent (act according to own personal moral beliefs), law and code (adhere to codes and regulations of a profession or another authority), rules (local rules of conduct), and instrumental (maximization of self-interest).

Path analysis results showed a significant, positive relationship between nurses rating the ethical climate of the hospital as caring and pay ($R = .49, p < .00$), work itself ($R = .30, p < .00$), overall job satisfaction ($R = .30, p < .00$), and normative commitment ($R = .17, p < .00$). A significant, positive relationship was found between nurses who rated the ethical climate of the hospital as independent and satisfaction with supervisor ($R = .18, p < .00$), and overall job satisfaction ($R = .13, p < .05$). There was no relationship between nurses who rated the ethical climate of the hospital as law and code and job satisfaction and organizational commitment ($p > .05$). There was a significant, positive relationship between nurses who rated the ethical climate of the hospital as rules and satisfaction with supervisor ($R = .33, p < .00$), satisfaction with co-workers ($R = .37, p < .00$), satisfaction with pay ($R = .15, p < .01$), overall job satisfaction ($R = .29, p < .00$), and normative commitment ($R = .17, p < .01$). There was a significant, negative relationship between nurses who rated the ethical climate of the hospital as instrumental and satisfaction with promotion ($R = -.14, p < .01$), overall job satisfaction ($R = -.10, p < .05$), affective commitment ($R = -.18, p < .00$), and overall organizational commitment ($R = -.13, p < .05$). A significant, positive relationship was found between instrumental ethical climate and continuance commitment ($R = .20, p < .00$). Satisfaction with supervisor had a strong, positive relationship between normative commitment ($R = .20, p < .00$), affective commitment ($R = .18, p < .01$), and overall job satisfaction ($R = .26, p < .00$). Pay had a significant, positive correlation with continuance commitment ($R = .27, p < .00$) and work itself had a significant, positive relationship with affective commitment ($R = .18, p < .01$) and overall job satisfaction ($R = .16, p < .01$).

The study reinforces the importance of creating a work climate where employees feel leaders make decisions based upon the best interests of everyone in the organization. This study is important for hospital leaders in learning how to retain nurses and keep them engaged in their work.

Ricketta (2008) conducted a meta-analysis of panel studies examining the causal relationship between job attitudes and performance. The researcher used 16 studies that examined the effect of performance (in-role and extra-role) and job attitudes (organizational commitment). The author was studying whether job attitudes predicted performance, whether performance predicted job attitude, whether performance and job attitudes caused each other, or whether performance and job attitudes were unrelated.

The researcher selected only studies where the employee was employed by the organization. Studies that measured job satisfaction, organizational commitment, and job performance were used and that had at least two measurement waves (panel study). Eligible organizations had to have had no major change and data had to be analyzed at the individual level rather than the group level.

Results of the meta-analysis indicated average uncorrected r 's between job satisfaction and organizational commitment with performance were weak, significant, and positive (r 's between .10 and .21, p 's < .05). Job attitudes and performance remained stable throughout the time lags (r 's > .52), with an average time lag of 9 months. Job attitudes were weak predictors of performance ($\beta = .08$ vs. $.03$, p 's < .05).

Tsai (2008) examined the relationship between a learning organization, internal marketing, and organizational commitment. The researcher defined a learning organization as those who use generative learning to continually improve and one that

provides opportunities for learning and shared responsibility for developing competence to meet organizational goals. The researcher defined internal marketing as the ability of an organization to retain employees through communications, training, recruitment, and encouragement.

The participants in Tsai's study were 45 nurses working in central Taiwan medical centers that had been recognized as a learning organizations for several years. An instrument measuring learning organization, internal marketing, and organizational commitment was administered to all participants.

Results of the study related to learning organization indicated a significant, positive correlation between the experience dimension of learning organization and value commitment ($r = .62, p = .00$) and work-hard commitment ($r = .41, p = .00$) of organizational commitment. There was also a significant, positive correlation between structure dimension of learning organization and value commitment ($r = .50, p = .00$), and work-hard commitment ($r = .42, p = .00$) of organizational commitment. Additionally, there was a significant, positive relationship between the culture dimension of learning organization and value commitment ($r = .58, p = .00$) and work-hard commitment ($r = .46, p = .00$) of organizational commitment.

Results of the study related to internal marketing indicated a significant, positive relationship between vision and the training dimension of internal marketing and value commitment ($r = .41, p = .00$) and work-hard commitment ($r = .34, p = .02$) of organizational commitment. There was also a significant, positive relationship between motivation and the communication dimension of internal marketing and value commitment ($r = .34, p = .02$) and work-hard commitment ($r = .66, p = .00$) of

organizational commitment. The researcher felt the results of the study emphasized the importance of hospital administrators improving employee competence prior to increasing operational abilities. The author attributed factors of the learning organization as a method of increasing employee competence. Internal marketing dimensions are a way for human resource leaders to recruit and retain staff and increase organizational commitment.

Dale and Fox (2008) conducted a study to examine the relationship between organizational commitment, leadership style, and the extent to which employees experience job role stress. The sample for the study was 147 full-time employees of a manufacturing firm located in the Midwest. A survey questionnaire measuring organizational commitment, role stress, leader consideration and leader initiating structure was administered to the participants.

Results of the study indicated a significant, positive relationship between organizational commitment and initiating structure ($r = .20, p < .05$) and consideration ($r = .48, p < .05$). A significant, negative correlation was found between organizational commitment and role stress ($r = -.56, p < .01$). Leaders who foster a work climate of support, trust and respect, as well as clearly defining supervisor and follower roles will increase organizational commitment and decrease stress of the employee.

Engagement Literature Review Summary

The literature supports the findings from Kahn's (1990) seminal work about engagement and how a person engages his or her whole self depending on meaningfulness, psychological safety, and psychological availability. An employee's relation with his or her supervisor is highly correlated with engagement, organizational

commitment, organizational citizenship behavior, job satisfaction, personal and team innovation, and enjoyment at work. Previous studies also showed that employees with higher organizational commitment had lower intention to leave an organization and had a higher degree of work performance, and less role stress. The studies emphasized repeatedly the influence a supervisor has on in-role and extra-role performance.

Supervisors must design work tasks in ways that are meaningful to followers. Leaders who involve followers in decision-making and create supportive, trusting leader/follower relations increase follower commitment and engagement. Organizations with lean workforces need leaders who engage employees to perform beyond expectations.

Hospitals and health systems focused on patient safety and quality of medical care will benefit greatly with leaders who can create workplace cultures described in the review of the literature.

Engagement Control Variables

Follower Age

Wagner and Rush (2000) conducted a study to examine the influence of employee age as a moderator of organizational citizenship behavior. Participants in the study were 96 nurses from two privately owned hospitals in the southeastern United States. Participants were administered an instrument that measured altruistic behavior and organizational citizenship behavior. Participants also completed the Defining Issues Test to measure moral development and items from the Interpersonal Trust at Work Scale.

Results of the correlational analyses found differences in antecedents of altruistic organizational behavior among younger employees than those among older employees.

Younger employees were found to have altruistic behavior related to trust in management ($r = .31, p < .05$), job satisfaction ($r = .47, p < .05$), and organizational commitment ($r = .40, p < .05$). Older employees were found to have altruistic behavior related to self-monitoring ($r = .35, p < .05$), moral judgment ($r = .32, p < .05$), and pay satisfaction ($r = -.31, p < .05$).

Jones and Harter (2005) conducted a study to examine the relationship between engagement and the intent to stay with an organization, when controlling for age. The Gallup Workplace Audit (GWA) was used, specifically the 12 items that measure employee workplace engagement. Intent to leave was measured by two items on the GWA measuring short-term intent and long-term intent to stay with the organization. Results of the study indicated a significant, positive relationship between employee age and intent to remain for one year ($r = .15, p < .01$), and intent to remain for their career ($r = .33, p < .01$).

Trimble (2006) conducted a study measuring the relationship between organizational commitment, job satisfaction, and turnover intention among 468 missionaries from Worldwide Evangelization for Christ International. The study specifically examined the differences of Baby Boomers (born 1946 to 1964) and Generation X (those younger than 36). Respondents were 56.8% Baby Boomers, 17.3% Generation X, 24.4% born prior to 1946, and 1.5% without age reported. Participants completed the Organizational Commitment Survey, the Organizational Communication Survey, the Communication Openness Measure, and a five item organizational satisfaction survey.

The researcher conducted *t* tests to examine differences between Gen Xers and Baby Boomers. Turnover intention for the Gen Xers ($M = 11.8$) and Baby Boomers ($M = 103$) was significant, $t(431) = -2.39, p = .01$.

Udechukwu, Harrington, Manyak, Segal, and Graham (2007) conducted a study to explore the relationship between turnover, job satisfaction, and organizational commitment. The respondents in the study were 34 female correctional officers from the Georgia Department of Corrections. The respondents completed the Minnesota Satisfaction Questionnaire, the Organizational Commitment Questionnaire, the Intention to Quit Questionnaire, and the Scale of Perceived Alternative Employment. Additionally, turnover data from the Human Resources Information System of the George Department of Corrections was collected to differentiate between voluntary and involuntary turnover.

Correlation analysis was conducted to determine the relationship between turnover, intent to quit, alternate employment, commitment, total satisfaction, and age of respondent. Age was found to have a significant, negative correlation with intent to quit ($r = -.348, p < .01$) and organizational commitment ($r = -.382, p < .05$). The younger the correctional officer, the greater the intention to quit and the greater the organizational commitment.

In the Zimmerman, Williams, et. al study (2005), older workers reported more satisfaction on three of the six subscales ($r =$ not reported, $p < .01$). The 2000 Cheung study reported a significant, positive relationship between follower age and organizational commitment ($R = .05, p < .05$).

Somers and Birnbaum (1999) studied the relationship between age and affect on continuance commitment, job satisfaction, job withdrawal intentions, and turnover. The

sample for the study was 154 professional employees from a teaching hospital in the southeastern United States. The mean age of the sample was 35.3 years.

Results of the study indicated that there was a significant, positive relationship between affective commitment and age ($r = .17, p < .05$). There were no significant relationships between age and continuance commitment, job satisfaction, job withdrawal intentions, and turnover ($p > .05$).

Li, Liu, and Wan (2007) studied the relationship between employee age and work values. Participants in the study were 316 employees from different organizations in North China. The participants completed the Work Value Inventory that measured what goals motivate people.

A Kruskal Wallis test was performed for the age demographic variable. Age had a significant, positive relationship with work values ($\chi^2 = 9.42, p = 0.019$). The older the employees, the higher they perceived their work values. Specific factors with a significant, positive difference were work-life balance ($\chi^2 = 17.03, p < .001$), self-development ($\chi^2 = 11.52, p < .01$) and job satisfaction ($\chi^2 = 7.30, p < .05$). The researchers stated the factor of work satisfaction showed an inverted characteristic in that both the youngest (25 or younger) and the oldest (45 or older) rated the lowest on the significance level.

In the 2008 Dale and Fox study, age was found to have a significant, positive correlation with organizational commitment ($r = .32, p < .01$). In a multiple regression analysis for predictor variables of initiating structure, consideration, years with the organization, years in position, years in education, age, gender, and race, age was a significant predictor of organizational commitment ($R^2 = .30, p < .01$) The same

regression model was run for predicting role stress and age was a significant predictor ($R^2 = .22, p < .01$).

Some studies found no relation or differences as a result of follower age. The Burke (2005) study reported no significant relationship between age and perceived hospital functioning ($p > .05$). Chughtai's 2008 study showed no relationship between respondent age and in-role performance and organizational citizenship behavior ($p > .05$). In the Tsai and Hang (2008) study, no significant relationship was reported between age of the nurse and job satisfaction or organizational commitment ($p > .05$).

Follower Gender

The 2007 Li, Lui, and Wan study, significant differences were found between gender and work values ($X^2 = 8.67, p < .01$). Factors with a significant difference were making contributions ($X^2 = 13.37, p < .05$) and self-development ($X^2 = 7.05, p < .01$). Men employees gave higher ratings than women.

All other studies found no differences as a result of follower gender. Chughtai's 2008 study showed no relationship between respondent gender and in-role performance and organizational citizenship behavior ($p > .05$). In the 2007 Wright, Cropanzano, and Bonett study, there was not a significant relationship between gender and job psychological well being ($p > .05$) or gender and job satisfaction ($p > .05$). The Burke (2005) study reported no significant relationship between gender and perceived hospital functioning ($p > .05$). Cheung's 2000 study reported no finding of significance between gender and organizational commitment ($p > .05$). Zimmerman, et. al. (2005) found no relationship between gender and satisfaction ($p > .05$). The Tsai and Huang (2008) study reported no significant findings between gender of the nurse and job satisfaction and

organizational commitment ($p > .05$). The Laschinger and Finegan study reported no significant relationship between gender and work engagement ($p > .05$).

In the Dale and Fox (2008) study, a multiple regression was conducted for the predictor variables of initiating structure, consideration, years with the organization, years in position, years in education, age, gender, and race. Gender was not a significant predictor of organizational commitment or role stress ($p > .05$).

Follower Ethnicity

In the 2007 Wright, Cropanzano, and Bonett study, a significant, positive relationship was found between ethnicity and job performance ($\beta = -.49, p < .01$), psychological well being ($\beta = .15, p < .01$), and job satisfaction ($\beta = .32, p < .01$).

In the Jones and Harter (2005) study, regression analyses was conducted to measure the effects of engagement and employee/supervisor dyad racial composition on turnover intention when also controlling for age, confidence in company, financial future, and annual income. The dyad racial composition was a significant predictor of scores for short-term intent to remain ($R^2 = .16, p < .05$). The dyad racial composition was not significant for long-term intent to remain.

In the 1999 Somers and Birnbaum study, a significant, positive relationship was found between ethnicity and continuance commitment ($r = .27, p < .01$). The researchers found blacks were less likely to leave than whites. Blacks were found to be older (mean age 37.6 versus 33.5, $t = 3.13, p < .01$), had a higher level of tenure (mean 59.3 versus 38.1 months, $t = 2.97, p < .01$) and had higher levels of continuance commitment (mean level 3.02 versus 2.65, $t = 3.97, p < .01$) than did whites. The researchers attributed the

differences to blacks feeling a higher level of investment in the organization than did whites.

In the Zimmerman, et. al. study (2005), black and other minority staff reported they were more satisfied with their environment ($M = 9.4, SD = 2.1$ and $M = 9.9, SD = 1.7$, respectively, vs. $M = 8.5, SD = ?$).

In the Dale and Fox (2008) study, a multiple regression was conducted for the predictor variables of initiating structure, consideration, years with the organization, years in position, years in education, age, gender, and race. Ethnicity was not a significant predictor of organizational commitment or role stress ($p > .05$).

Follower Education

The Li, Liu, and Wan (2007) study found a significant, positive relationship between education and employee work values. The higher the education one received, the higher the rating was for work values ($\chi^2 = 12.41, p = .02$).

Other studies reported no differences as a result of follower education. The Burke (2005) study reported no significant relationship between education and perceived hospital functioning ($p > .05$). The Cheung study (2000) showed no significant relationship between education and organizational commitment ($p > .05$). The 2005 study by Laschinger and Finegan reported no significant relationship between nurse education and work engagement ($p > .05$). The Zimmerman, et. al (2005) study showed a significant, positive relationship between education and a more hopeful attitude and no relationship between education and satisfaction ($p > .05$). Tsai and Huang (2008) reported no significant relationship between education of the nurse and job satisfaction and organizational commitment.

In the Dale and Fox (2008) study, a multiple regression was conducted for the predictor variables of initiating structure, consideration, years with the organization, years in position, years in education, age, gender, and race. Education was not a significant predictor of organizational commitment or role stress ($p > .05$).

Follower Location

There was no scholarly studies found examining the relationship between the proxies for engagement and the location a follower worked in.

Follower Tenure with the Organization

Burris and Detert (2008) found a relationship between tenure with the organization and having ideas ($r = -.16, p < .01$) and detachment (intention to leave) ($r = .12, p < .01$).

The 2007 Udechukwu, Harrington, Manyak, Segal, and Graham study found a significant, negative relationship between tenure with the organization and intent to leave the organization ($r = -.30, p < .05$). Tenure had a significant, positive relationship between total satisfaction ($r = .29, p < .05$). The more tenure the correctional officer had, there was less intention to leave the organization and more total satisfaction.

In the 2007 Wright, Cropanzano, and Bonett study, there was not a significant relationship between tenure with the organization and psychological well being ($p > .05$). Additionally, no significant relationship was found between tenure with the organization and job performance ($p > .05$).

The Burke (2005) study found no significant relationship between tenure with the organization and perceived hospital functioning ($p > .05$). In the 2000 Wagner and Rush

study, no significant relationships were found between tenure with the organization and altruistic organizational citizenship behavior ($p > .05$).

In the Dale and Fox (2008) study, a multiple regression was conducted for the predictor variables of initiating structure, consideration, years with the organization, years in position, years in education, age, gender, and race. Tenure with the organization was not a significant predictor of organizational commitment or role stress ($p > .05$).

Follower Tenure with the Leader

In the Burris and Detert (2008) study, position tenure (proxy for tenure with leader) had a significant, negative correlation with having ideas ($r = -.15, p < .01$). Additionally, position tenure had a significant, negative correlation with leader-member exchange ($r = -.15, p < .01$) and a significant, positive correlation with abusive supervision ($r = .09, p < .05$). Lastly, the study found position tenure to have a significant, negative correlation between position tenure and voice (general manager rated) ($r = -.15, p < .01$).

In the 2005 Zimmerman, et. al study, no significant relationship between tenure in present job and satisfaction ($p > .05$). The author reported a slight, negative relationship between being in present job 1-2 year and satisfaction with feedback and perception of the organization being caring ($p < .10$).

In the Dale and Fox (2008) study, a multiple regression was conducted for the predictor variables of initiating structure, consideration, years with the organization, years in position, years in education, age, gender, and race. Tenure in position was a significant predictor of organizational commitment and role stress ($R^2 = -.20, p > .05$).

In the Ricketta (2008) meta-analysis, the effects of job attitudes as predictors of performance were stronger for shorter than longer time lags ($\beta = .12, p < .001$, for 1-6 months; $\beta = .02, ns$, for 7-12 months; $\beta = .03, ns$, for more than 12 months). There was no difference between in-role and extra-role performance ($\beta = .05, ps < .05$). Effects of performance on job attitudes were subtle. The only significant effect was for moderate time lag ($\beta = -.08, p < .00$, 7-12 months).

Follower Department Type

There were no scholarly studies found examining the relationship between the proxies for engagement and the type of department a follower worked in.

Team Size

Magjuka and Baldwin (1991) conducted a study to measure team-based employee involvement programs and team size. Team size was measured as full-time equivalents rather than number of employees. The sample for the study consisted of 41 teams from a Fortune 500 company and 33 teams from a private manufacturer. The study had 1,468 individual respondents. Respondents completed a questionnaire with 60 items measuring team effectiveness and how team effectiveness contributed to individual work performance. Team size in the study ranged from 8 to 46 members.

Regression analysis indicated the regression equation for employee involvement programs (design of teams) was significant, $F(8, 65) = 13.81, p < .01$ and accounted for 58% of the variance in evaluations of effectiveness. Team size was statistically significant ($R^2 = .03, p < .01$).

In 2001, Curren, Forrester, and West conducted a study of the relationship between team inputs (including task type and team size) and team process in 87

Portuguese team from cross industries. The Team Climate Inventory (TCI) was administered to 398 members of the 87 teams. Teams ranged in size from 2 to 18 members, with a mean of 5 members. Supervisors of team members assessed frequency of the requirement to innovate as a team using a scale designed by the researcher.

Results of the study showed a significant, negative correlation between all team processes and team size. Team processes correlations were as follows: participation ($r = -.30, p < .01$), support for innovation ($r = -.29, p < .01$), clarity of objectives ($r = -.22, p < .05$), emphasis on quality ($r = -.32, p < .01$), and TCI mean ($r = -.33, p < .01$). In addition, teams with a high need to innovate also had a significant, negative correlation with team size and team process: emphasis on quality ($r = -.51, p < .00$) and TCI mean ($r = -.34, p < .05$). The study emphasizes the importance of team size as a predictor of team process for teams with a high innovation requirement. Healthcare systems in today's competitive environment require innovation and creativity to remain financially viable.

Colquitt, Noe, and Jackson (2002) conducted a study to examine the antecedents and consequences of procedural justice climate in a sample of 1,747 employees from 88 teams from an automobile parts manufacturing firm. Procedural justice was measured using a 7-item scale (measuring norms and work environment) and team performance was assessed by the team supervisor.

Results of the study showed a significant, negative correlation between team size and team collectivism ($r = -.46, p < .05$), procedural justice climate level ($r = -.39, p < .05$), and procedural justice climate strength ($r = -.28, p < .05$). A significant, positive correlation was found between team size and team absenteeism ($r = .31, p < .05$). A multiple regression analysis was conducted for the predictor variables of team size,

demographic diversity, and collectivism. Team size was a significant predictor of procedural justice climate level ($R^2 = -.27, p < .05$) and procedural justice climate strength ($R^2 = -.21, p < .05$).

Pearce and Herbig (2004) conducted a study examining the effects of team size on organizational citizenship behavior. The researchers sampled 71 change management teams in the automotive industry in the mid-Atlantic United States. Team members who participated totaled 197 individuals. There were also 40 team leaders who responded. Respondents completed a questionnaire measuring team leader behavior, team commitment, perceived team support, and team citizenship behavior. Team size was not a significant predictor of team commitment behavior as rated by both the leader and the team member ($p > .05$).

Follower Salary

Few studies in the scholarly literature examined the relationship between follower engagement (or its proxy) and follower salary. In the 2005 Jones and Harter study, multiple regression was used to analyze the relationship between employee annual income and intent to remain short-term, long-term, and employee engagement. There was a significant, positive relationship between annual income and intent to remain short-term ($r = .17, p < .01$) and intent to remain long-term ($r = .18, p < .01$). There was no relationship between annual income and employee engagement ($p > .05$).

The 2007 Udechukwu, Harrington, Manyak, Segal, and Graham study found a significant, positive relationship between correctional officer salary and intent to leave the organization ($r = -.51, p = .002$). The less money the correctional officer made, the more intent to leave the organization was reported by the respondent.

Tsai and Huang (2008) reported no significant relationship between salary of the nurse and job satisfaction and commitment ($p > .05$).

Follower Engagement Control Variable Summary

Results of the review of the literature regarding age as a control variable were mixed. Younger followers had higher trust in management, job satisfaction, and organizational commitment than older followers in a few of the studies. More studies reported a positive relationship between follower age and organizational commitment, specifically affective commitment. There was also several studies that indicated the older the follower, the less the intent to leave the organization, implying the older followers were more committed to remaining with the organization.

Follower gender was not significant for all but one study. Overall, gender did not play a role in organizational commitment, organizational citizenship behavior, psychological well-being, in-role performance, or job satisfaction.

The research indicated follower ethnicity was a predictor of job performance, job satisfaction, and continuance commitment. Minorities were found to be more satisfied with the work environment, specifically black followers.

Overall, follower education was not significant in the studies reported in the literature review.

Studies reviewed for tenure with the organization were mixed. More studies reported a non-significant relationship with the dependent variable. One study reported higher satisfaction and lower intent to leave the higher the follower's tenure with the organization. No studies were found related to tenure with the follower's leader. Tenure in position was used a proxy for tenure with the leader. Studies examining tenure in

position found increased position tenure was related to decreased follower ideas, voice, supervisor relations, and organizational commitment.

Studies related to the variable of team size primarily indicated that the greater the team size, the lower the team effectiveness, follower involvement, participation, innovation, clarity of roles, and quality outcomes. Absenteeism increased as team size increased. Team size overall decreased team outcomes, yet one study found no relationship between team size and individual organizational citizenship behavior.

The studies reviewed that examined the relationship between follower salary indicated that the higher the salary of the follower, the lower the intent to leave the organization both short-term and long-term. No relationship was noted between salary and job satisfaction or commitment.

Leadership Style

This section of the literature review examines studies examining the relationship between transformational leadership and the proxies of follower engagement (organizational commitment, organizational citizenship behavior, perceived organizational support, and job satisfaction). In 2006, Nguni, Slegers, and Denessen conducted a study to examine the relationship between transformational leadership, teacher job satisfaction, organizational commitment, and organizational citizenship behavior. The study was conducted in the developing country of Tanzania and teachers from 70 schools were selected as participants. Eligibility requirements of the schools were that the head teacher had to have one year tenure with the school and at least 20 teachers were at the school who had worked for the head teacher for a minimum of one year. A total of 560 teachers responded to the questionnaire that consisted of 95 items.

The MLQ version 1 was used to measure leadership. This version of the MLQ defined transformational leadership with three components: charismatic leadership, individualized consideration, and intellectual stimulation. Transactional leadership was defined with four components: contingent reward, active management-by-exception, passive management-by-exception, and laissez-faire. The Organizational Commitment Questionnaire was used to measure two components of organizational commitment: value commitment and commitment to stay. Organizational Citizenship Behavior was measured with 16 items, and the Minnesota Satisfaction Questionnaire was used to measure job satisfaction.

Pearson correlational analysis was used to examine the relationship between the variables. All components of transformational leadership showed a significant, positive relationship with organizational commitment, organizational citizenship behavior, and job satisfaction. Charismatic leadership was positively related to value commitment ($r = .66, p < .05$), commitment to stay ($r = .34, p < .05$), organizational citizenship behavior ($r = .52, p < .05$), and job satisfaction ($r = .53, p < .05$). Individualized consideration was positively related to value commitment ($r = .49, p < .05$), commitment to stay ($r = .25, p < .05$), organizational citizenship behavior ($r = .44, p < .05$), and job satisfaction ($r = .46, p < .05$). Intellectual stimulation was positively related to value commitment ($r = .36, p < .05$), organizational citizenship behavior ($r = .36, p < .05$), and job satisfaction ($r = .42, p < .05$). There was no relationship between intellectual stimulation and commitment to stay ($p > .05$).

Transactional leadership had both positive and negative significant correlations. Active management-by-exception had significant, positive relationships with value

commitment ($r = .32, p < .05$), commitment to stay ($r = .16, p < .05$), organizational citizenship behavior ($r = .30, p < .05$), and job satisfaction ($r = .28, p < .05$). Passive management-by-exception had significant, negative relationships with value commitment ($r = -.23, p < .05$), commitment to stay ($r = -.44, p < .05$), and organizational citizenship behavior ($r = -.22, p < .05$). There was no relationship between passive management-by-exception and job satisfaction ($p > .05$).

Laissez-faire leadership had significant, negative relationships with value commitment ($r = -.25, p < .05$), commitment to stay ($r = -.46, p < .05$), and organizational citizenship behavior ($r = -.23, p < .05$). There was no relationship between laissez-faire leadership and job satisfaction ($p > .05$).

Multiple regression analysis was used to analyze the effects of transformational and transactional leadership on organizational commitment, organizational citizenship behavior, and job satisfaction. Transformational leadership explained 39% of the variance in teacher value commitment ($R^2 = .39, p < .05$) and 28% of the variance in commitment to stay ($R^2 = .28, p < .05$). Transformational leadership explained a significant amount of variance for value commitment ($R^2 = .18, p < .05$) and a lower, yet significant amount of variance for commitment to stay ($R^2 = .03, p < .05$). Transactional leadership explained a significant amount of variance for commitment to stay ($R^2 = .18, p < .05$). There were no significant findings for transactional leadership and value commitment ($p > .05$).

When looking at the effects of transformational and transactional leadership on organizational citizenship behavior, there were no significant findings when looking at both factors together ($p > .05$). Transformational leadership did explain a significant amount of variance for organizational citizenship behavior ($R^2 = .12, p < .05$). One item

from the transactional leadership factor explained a significant yet low amount of variance, active management by exception ($R^2 = .01$, $p < .05$).

Transformational and transactional leadership explained a significant amount of variance of job satisfaction ($R^2 = .33$, $p < .05$). Transformational leadership by itself explained a significant amount of variance ($R^2 = .1539$, $p < .05$), as did transactional leadership ($R^2 = .39$, $p < .05$). The study suggests that teachers in Tanzania found transformational leadership to impact their value commitment, organizational citizenship behavior, and job satisfaction in a positive way.

Moss, Ritossa, and Ngu (2006) studied the relationship between transformational leadership and organizational commitment. Participants were from governmental agencies in Australia. A total of 263 pairs of managers and subordinates responded. The MLQ Form 5x was used to measure leadership style. The researchers removed the questions from the MLQ pertaining to active management-by-exception as they wanted to only study the effects of corrective-avoidant behavior. The two scales were used to measure organizational commitment (affective and normative commitment).

Pearsons correlational analysis was used to analyze the data from the respondents. Transformational leadership had a significant, positive relationship with affective commitment ($r = .32$, $p < .01$) and normative commitment ($r = .34$, $p < .01$). Corrective-avoidant behavior did not have a relationship with affective or normative commitment ($p > .05$). The respondents found their leaders who were more transformational to have a positive influence on commitment to the organization.

Walumbwa, Orwa, Wang, and Lawler (2005) studied the relationship between transformational leadership and job satisfaction and organizational commitment. The

study compared Kenya and the United States. Participants in the study were selected from seven banks in Kenya and five in the United States. Participants were primarily tellers and clerks. A total of 158 respondents from Kenya and 189 from the United States responded to the study. Measures for the study included 25 items from the MLQ to measure leadership behavior, ten items measuring emotional attachment to the organization (organizational commitment) and 18 items from the Job Descriptive Index to measure job satisfaction with the respondent's supervisor (bank manager). Correlation analysis results indicated transformational leadership had a significant, positive correlation with emotional commitment ($r = .35, p < .01$), supervisor satisfaction ($r = .65, p < .01$), and general satisfaction ($r = .29, p < .01$).

Walumbwa, Lawler, Avolio, Wang, and Shi (2005) examined transformational leadership and work-related attitudes of job satisfaction and organizational commitment and the moderating effects of self-efficacy across cultures. Self-efficacy was defined as an individual's belief in his or her capability to successfully accomplish tasks. Collective efficacy was defined as the respondent's assessment of the group's overall capacity to accomplish tasks. The researchers conducted their study using 37 bank branches located in China, India, and the United States. The total number of respondents included 208 from China, 194 from India, and 242 from the United States.

Measures for the study included 20 items from the MLQ Form 5X, work efficacy beliefs were measured using 7 items, organizational commitment was measured using 10 items, and job satisfaction was measured using 9 items from the Job Descriptive Index. Unites States results showed a significant, positive relationship between transformational leadership and self-efficacy ($r = .40, p < .01$), organizational commitment ($r = .41, p <$

.01), and job satisfaction ($r = .33, p < .01$). There was no relationship between transformational leadership and collective efficacy ($p > .05$). China results showed a significant, positive relationship between transformational leadership and self-efficacy ($r = .27, p < .01$), organizational commitment ($r = .42, p < .01$), and job satisfaction ($r = .47, p < .01$). There was no relationship between transformational leadership and collective efficacy ($p > .05$). India results showed a significant, positive relationship between transformational leadership and self-efficacy ($r = .27, p < .01$), organizational commitment ($r = .33, p < .01$), and job satisfaction ($r = .37, p < .01$). There was no relationship between transformational leadership and collective efficacy ($p > .05$). The United States means were significantly different than the combined means of China and India on self-efficacy ($t = 7.88, p < .001$), collective efficacy ($t = 5.60, p < .001$), and job satisfaction ($t = 3.30, p < .001$). No significant differences were found in the means of transformational leadership ($t = .81, p > .10$) and organizational commitment ($t = .73, p > .10$).

Dumdu, Lowe and Avolio (2002) studied the relationship between transformational leadership and correlates of effectiveness and satisfaction in a meta-analysis. Both published and unpublished studies were used in the meta-analysis. Forty-nine studies met the researchers' criteria. The criteria for eligible studies included the following: must have used the MLQ to measure leadership style, must have reported leadership effectiveness measures, the sample size was reported, a correlation between leadership style and effectiveness must have been reported, and the leader rated must have been the direct leader of the follower.

Results of the overall meta-analysis for combining effectiveness and satisfaction measures for transformational leadership were an average uncorrected $r = .40$ with a standard deviation of .89. After artifact correction, the average corrected $r = .46$ with the start of the 95% credibility interval 1.0. The meta-analysis specifically measuring the satisfaction outcome for transformational leadership was an average corrected of $r = .35$ with a standard deviation of .88. After artifact correction, the average corrected $r = .40$ with the start of the credibility interval .95.

Bono and Judge (2003) studied the relationship between transformational leadership and follower job satisfaction, follower satisfaction with leader, follower job performance, and follower self-concordance. The participants of the study included 173 leaders and 680 of their followers from 9 organizations comprising a wide variety of services and manufacturing. Transformational leadership was measured using the MLQ-Form 5X. Follower satisfaction with leader was measured using the Job Diagnostic Survey. Follower job satisfaction was measured using 5 items from the Brayfield Rothe Scale, and organizational commitment was measured using 8-items on the Affective Commitment Scale. Follower job performance was assessed by the leader from several outcomes and an overall job performance score was derived. Self-concordance, which is the extent that a follower's job-related tasks and goals express the follower's individual interests and values, was measured by followers identifying goals and responding to 4 items that represented a continuum of self-concordant reasons for goal pursuit.

The results of the study indicated transformational leadership had a significant, positive relationship with follower self-concordance ($r = .13, p < .01$), follower autonomous reasons for goal pursuit ($r = .21, p < .01$), follower job satisfaction (self-

report) ($r = .17, p < .01$), follower job satisfaction (significant-other report) ($r = .14, p < .01$), follower satisfaction with supervision ($r = .42, p < .01$), follower organizational commitment ($r = .25, p < .01$), and follower job performance ($r = .16, p < .01$).

Judge and Piccolo (2004) conducted a meta-analysis to examine the relationship between transformational leadership and many leadership criteria, one of which was follower job satisfaction. The researchers searched the PsychINFO database for studies published between 1887 and 2003 that contained information needed to calculate correlations among the variables of their study. Eight-seven studies met the criteria set forth by the researchers and 626 correlations were reported. The researchers used the Q statistic for the meta-analyses and also conducted regression analysis to determine the independent contributions of leadership behavior to the defined leadership criteria of the study.

Results of the study indicated that transformational leadership and contingent reward leadership produced the most consistent and the strongest correlations across the leadership criteria. The Q statistic for transformational leadership was 1,279.91 ($p < .01$) and the Q for contingent reward was 686.59 ($p < .01$). The correlation for transformational leadership and follower job satisfaction was $\rho^{\hat{}} = .58$ ($p < .05$) and the correlation for contingent reward and follower job satisfaction was $\rho^{\hat{}} = .64$ ($p < .05$). Management by exception-active and passive did not have enough data to report independent correlations with job satisfaction, however, Laissez-faire leadership had a negative correlation of $\rho^{\hat{}} = -.28$ at a 90% confidence interval level excluded zero.

In a 2007 study (Korkmaz), the relationship between a school principal's leadership style and teacher job satisfaction was conducted. The sample of teachers

included 635 teachers working in a Turkish school out of a 875-person sample. An instrument adapted from the MLQ was administered and consisted of 36 items related to transformational and transactional leadership. The findings indicated that transformational leadership had a significant impact on teachers' job satisfaction ($r = .55$, $p < .00$).

Boerner, Eisenbeiss, and Griesser (2007) conducted a study to examine the relationship between transformational leadership, organizational citizenship behavior, performance, debate and innovation. The participants for the study were 91 leaders from 91 different German companies. The leaders rated their own leadership style using the MLQ-Form 5X and rated their followers organizational citizenship behavior using 5 items rated on a 7 point scale. Follower performance was rated by the leader using 5 items assessing both quantitative and qualitative aspects of performance. Debate was measured by the leader's assessment of their follower's task-oriented communication behavior using four-items. Follower innovation was assessed by the leader using Role Based Performance scale that consisted of 4 items.

The results of the study showed a significant, positive relationship between transformational leadership and organizational citizenship behavior ($r = .32$, $p < .01$), performance ($r = .45$, $p < .00$), debate ($r = .53$, $p < .00$) and innovation ($r = .36$, $p < .00$). Transactional leadership had a significant, positive relationship with performance ($r = .28$, $p < .01$). Analysis of the mediating effect of organizational citizenship behavior using regression analysis indicated that transformational leadership explained a significant variance in organizational citizenship behavior ($\beta = .32$, $p < .01$).

Transformational leadership also explained significant variance in innovation ($\beta = .36$, $p < .00$) and debate ($\beta = .53$, $p < .00$).

Wang and Walumbawa (2007) studied the effects of transformational leadership and the relationship between family-friendly programs, organizational commitment, and work withdrawal. Family-friendly programs were defined by the researcher as flexible scheduling, child and elder care assistance, ability to work at home, and personal and family leave.

Participants in the study were from 45 different bank branches in China, Kenya, and Thailand. The total number of participants included 475 employees, of which 47.30% were women, average tenure was 9.40 years, and 95% had a community or university degree. Family-friendly programs was measured by an instrument developed by the researchers, the MLQ Form 5X Short was used to assess leadership style, a short version of the Organizational Commitment Scale was used to assess organizational commitment, and work withdrawal was measured using a scale assessing nine behaviors on an 8-point scale. Control variables of age, gender, marital and parental status, and tenure were also collected.

Results of the study indicated a significant, positive relationship between transformational leadership and organizational commitment ($r = .31$, $p < .01$), as well flexibility benefits ($r = .15$, $p < .01$). There was also significant, positive correlations between childcare benefits and organizational commitment ($r = .15$, $p < .05$) and flexibility benefits and organizational commitment ($r = .14$, $p < .01$). Leaders who are perceived as inspiring, challenging, and individually considerate moderate the effects of family-friendly programs and organizational commitment.

In 2007, Emery and Barker conducted a study to examine the relationship between transformational leadership and organizational commitment and job satisfaction of employees in banking and food stores. The participants included 77 bank branch managers and 47 store managers from a national food chain. The respondents of the study completed the MLQ-1 abridged version containing 27-items measuring transformational leadership. Organizational citizenship behavior was measured using a 15-item instrument. Job satisfaction was measured using a modified 11-item version of Job Description Questionnaire (JDI) that assessed items only affected by supervisor style.

Correlation analysis was used to analyze the results of the study. Three factors of transformational leadership had a significant, positive relationship with organizational commitment for food store employees and these were charisma ($r = .43, p < .01$), intellectual stimulation ($r = .38, p < .01$), and individual consideration ($r = .37, p < .01$). One factor from transactional leadership had a significant positive relationship with organizational commitment, contingent reward ($r = .44, p < .01$). Management-by-exception had a significant, negative correlation with organizational commitment ($r = -.15, p < .05$). Job satisfaction was also higher with those managed with a transformational leader. The two factors having a significant, positive relationship to job satisfaction were charisma ($r = .21, p < .05$) and intellectual stimulation ($r = .32, p < .01$). There was a significant, negative correlation between job satisfaction and management-by-exception ($r = -.24, p < .01$).

Results for banking employees were similar. Three factors from transformational leadership had a significant, positive correlation with organization commitment and they were charisma ($r = .39, p < .01$), intellectual stimulation ($r = .26, p < .01$), and

individualized consideration ($r = .39, p < .01$). Transactional leadership had one factor with a significant, positive relationship and it was contingent reward ($r = .26, p < .01$). Management-by-exception had a significant, negative relationship ($r = -.16, p < .01$). The only factor of transformational leadership with a significant, positive relationship to job satisfaction was intellectual stimulation ($r = .13, p < .05$). None of the transactional factors had a significant relationship ($p > .05$).

The researchers also used stepwise hierarchical regression analysis to determine the predictive effects of transformational leadership on organizational commitment and job satisfaction. Charisma was the only factor that was a significant predictor of organizational commitment ($R^2 = .15, p < .01$) for bank employees and for food store employees ($R^2 = .18, p < .01$). Intellectual stimulation was the only significant predictor of job satisfaction ($R^2 = .02, p < .026$) for bank employees and for food store employees ($R^2 = .15, p < .01$).

Avolio, Zhu, Koh, and Bhatia (2004) conducted a study examining the mediating effects of psychological empowerment on transformational leadership and organizational commitment. Psychological empowerment was defined as intrinsic task motivation towards one's work role. Four components of empowerment were competence (personal mastery), impact (making a difference), meaning (weight given a task), and self-determination (degree of autonomy in making decisions).

Participants for the study were 502 staff nurses who worked for a large hospital in Singapore. The MLQ Form 5X was used to measure leadership, 9 items were used to measure organizational commitment, and 12 items were used to measure psychological empowerment. The nurses rated senior staff nurses (their direct supervisor) and nursing

officers (indirect supervisor), as well as the nurses rating their own level of psychological empowerment and organizational commitment.

Correlation analysis found transformational leadership at the senior staff nurse level to be significantly correlated with transformational leadership at the nursing officer level ($r = .43, p < .01$). Transformational leadership at the nursing officer level was significantly correlated with psychological empowerment ($r = .23, p < .05$) and organizational commitment ($r = .18, p < .05$). Transformational leadership at the senior staff nurse level was significantly correlated with psychological empowerment ($r = .15, p < .05$) and organizational commitment ($r = .15, p < .05$). This study depicts the importance of not only a nurse's direct supervisor's leadership style, but also the leadership style of the chief nurse of the healthcare facility in enhancing organizational commitment.

In a 2004 study by Chen, the MLQ was administered to 749 employees of small and middle-sized service and manufacturing firms in Taiwan to examine the effects of organizational culture and leadership behavior on organizational commitment, job satisfaction, and job performance. Organizational culture was defined as bureaucratic (hierarchical and compartmentalized), innovative (creative, results-oriented, challenging), and supportive (team and people-oriented, encouraging, trusting). Respondents completed the MLQ as a measure for leadership behavior. Respondents also completed the Organizational Culture Index, the Organizational Commitment Questionnaire, the Minnesota Satisfaction Questionnaire, and several questions related to job performance.

Correlation results showed a significant, positive correlation between transformational leadership and organizational commitment ($r = .48, p < .01$) and job

satisfaction ($r = .54, p < .01$). Transformational leadership also showed a significant, positive relationship with bureaucratic culture ($r = .21, p < .01$), innovative culture ($r = .46, p < .01$), and supportive culture ($r = .58, p < .01$). Transactional leadership had a significant, positive relationship with bureaucratic culture ($r = .10, p < .01$), innovative culture ($r = .21, p < .01$), supportive culture ($r = .18, p < .01$), and job satisfaction ($r = .16, p < .01$). The study emphasizes how transformational leadership can enhance organizational commitment and job satisfaction.

Walumbwa and Lawler (2003) studied the effects of transformational leadership on work-related attitudes and withdrawal behaviors in three different countries. Participants were 577 employees from banking and financial organizations in China, India, and Kenya. Participants completed the MLQ Form 5X-Short, 11 items to measure collectivism, the Job Descriptive Index, 10 items to measure organizational commitment, and 16 items to measure organizational withdrawal behaviors,

Results of correlation analysis showed transformational leadership had a significant, positive relationship with collectivism ($r = .20, p < .01$), satisfaction with co-worker ($r = .31, p < .01$), satisfaction with supervisor ($r = .52, p < .01$), satisfaction with work in general ($r = .45, p < .01$), and organizational commitment ($r = .41, p < .01$). Transformational leadership had a significant, negative relationship with job withdrawal ($r = -.14, p < .01$) and work withdrawal ($r = -.10, p < .05$).

Kent and Chelladurai (2001) studied the relationship between perceived transformational leadership, organizational commitment, and organizational citizenship behavior. Participants in the study were 75 direct reports of middle level managers in an athletic department of a Midwestern university. The participants rated the Athletic

Director's leadership style and also the leader-member exchange quality between the respondent and the middle level manager (associate athletic director and/or departmental director). The MLQ was used to measure leadership style. The LMX-7 was used to measure quality of exchange between managers and followers. Participants also completed 6 items measuring organizational citizenship behavior, and six items measuring organizational commitment.

Pearson's correlations showed the three items from transformational leadership had a relationship with outcome variables. Charismatic leadership was related to LMX quality ($r = .24, p < .05$), affective commitment ($r = .48, p < .00$), and normative commitment ($r = .35, p < .01$). Individualized consideration had a relationship with LMX quality ($r = .38, p < .00$), affective commitment ($r = .49, p < .00$), and normative commitment ($r = .29, p < .05$). Intellectual stimulation had a significant relationship with affective commitment ($r = .31, p < .05$).

Morrison, Jones, and Bridger (1999) examined the relationship between transformational leadership and job satisfaction. Respondents were 230 nurses at a regional medical center located in the southeastern United States. The MLQ-5X was administered to the respondents, as well as 4 items to measure empowerment (the degree to which an individual is intrinsically motivated in his or her work role).

Moderated multiple regression analysis was conducted to test the interaction between transformational leadership and empowerment in predicting job satisfaction. The empowerment interaction contributed to the explained variance in job satisfaction for idealized influence, inspiration, and individualized consideration, $F(1, 225) = 3.95, p <$

.05). The empowerment interaction was not significant for intellectual stimulation ($p > .05$).

In a 2000 study by Lawrence, a study was conducted to examine the relationship between a hospital leader's self-reported measure of transformational, transactional, and laissez-faire leadership style, the leader's followers' perception of the leader's leadership style, and the outcome variable of follower satisfaction. The MLQ 5X was administered to 45 department heads and senior executives and 113 of their followers from two acute care hospitals in south Florida. Regression analysis was used to test the research hypothesis. Results of the study indicated that there was a significant "relationship between senior executives/department heads transformational leadership style and their immediate subordinates' perception of satisfaction" (Lawrence, 2000, p. 106) ($r = .58$, $F = 29.5791$, Critical $F = 2.31$, $p < .05$).

Leadership Style Literature Review Summary

All the studies reviewed found transformational leadership to have a significant, positive relationship with organizational citizenship behavior, organizational commitment, and job satisfaction. Transformational leadership was also found to positively impact satisfaction with supervisor and follower performance and innovation. Transformational leadership also decreased a follower's intent to leave the organization. Management-by-exception active and contingent reward were found to be the only dimensions of transactional leadership that had a significant, positive correlation with the outcomes mentioned above. Management-by-exception passive and passive leadership were found to have significant, negative correlations with performance, organizational

commitment, organizational citizenship behavior, intent to remain with the organization and job satisfaction.

Leadership Style Control Variables

Of the numerous studies searched in the scholarly databases, nearly all the studies used leader demographics rather than follower demographics as control variables. The few studies reporting follower control variables follow.

MLQ and Age

In the 2005 Walumbwa, Orwa, Wang, and Lawler study, no significant relationship was found between follower age and rating of leader's transformational score, follower organizational commitment, follower satisfaction with supervisor, and follower general satisfaction ($p > .05$).

In the Avolio, Zhu, Koh, and Bhatia (2004) study, age of the follower had a significant relationship with transformational leadership at the indirect level (senior staff nurse) ($r = .11, p < .05$) and with organization commitment ($r = .18, p < .01$).

MLQ Gender

In the 2004 Kleinman study, no significant differences were found in follower perceptions of leadership behaviors as a result of gender ($p > .05$). The 2005 study by Walumbwa, Orwa, Wang, and Lawler also found no significant differences in follower rating of leadership behavior by gender ($p > .05$). The Chen (2004) study reported no findings as a result of follower gender ($p > .05$).

MLQ and Ethnicity

In the Avolio, Zhu, Koh, and Bhatia (2004) study, race of the follower had a significant, negative relationship with transformational leadership at the indirect level of senior staff nurse ($r = -.11, p < .05$) and with empowerment at the indirect level ($r = -.19, p < .01$). Chinese nurses rated their leaders less transformational and felt less empowered than non-Chinese nurses.

MLQ and Education

Walumbwa, Orwa, Wang, and Lawler (2005) found no significant differences in education level of the follower and transformational leadership, organizational commitment, and job satisfaction ($p > .05$). In the 2004 Kleinman study, no significant differences were found in follower perceptions of leadership behaviors as a result of education level ($p > .05$). The Chen (2004) study reported no findings as a result of follower education level ($p > .05$).

MLQ and Location

There were no scholarly studies examining the relationship between leadership style and the work location of a follower.

MLQ and Tenure with the Organization.

In the Avolio, Zhu, Koh, and Bhatia (2004) study, tenure with the hospital had a significant, negative relationship with transformational leadership at the indirect level of senior staff nurse ($r = -.13, p < .05$). The Chen (2004) study reported no findings as a result of follower tenure with the organization ($p > .05$).

MLQ and Tenure with Leader

In the Avolio, Zhu, Koh, and Bhatia (2004) study, tenure with the direct leader of senior staff nurse had a significant, negative relationship with transformational leadership at the direct level of senior staff nurse ($r = -.18, p < .05$) and with transformational leadership at the indirect level of nursing officer ($r = -.17, p < .05$). Tenure with the leader had a significant, positive relationship with organizational commitment ($r = .20, p < .05$). In the 2004 Kleinman study, no significant differences were found in follower perceptions of leadership behaviors as a result of tenure on their work unit ($p > .05$).

MLQ and Department Type

There were no scholarly studies examining the relationship between leadership style and the type of department a follower worked in.

MLQ and Team Size

No studies were found reporting on the relationship between leadership style and size of team.

MLQ and Salary

No studies were found reporting on the relationship between leadership style and follower salary.

Leadership Style Control Variables Summary

Scholarly research applicable to use of the MLQ and follower control variables was limited at best. Not enough studies were found from which to draw reliable conclusions.

Expected Outcomes of Study

The review of the literature clearly identifies the relationship between transformational leadership and the proxy studies used in lieu of follower engagement.

Results of the study at CHRISTUS Health are expected to show similar relationships. It is believed that transformational leadership will have a significant, positive relationship with follower engagement and that transactional and passive/avoidant leadership will have a significant, negative relationship with follower engagement.

CHAPTER THREE

METHODOLOGY

Overview

This chapter begins with an overview of the study, followed by a description of the instruments used in the research. The sampling plan used to conduct the study is also defined, followed by operational definitions for both the dependent and independent variables, and the research design is explained. Additionally, this chapter states the null hypotheses, the procedure used to collect data, and ethical considerations that were examined.

This study examined the relationship between associate engagement and the leadership style of leaders of business units in one of the ten largest catholic healthcare systems in the United States, CHRISTUS Health. CHRISTUS Health formed in 1999 when two Catholic health systems, Incarnate Word Health System and Sisters of Charity Health System, joined to form a stronger delivery system. CHRISTUS Health has an associate population of approximately 30,000 associates. CHRISTUS Health includes acute care hospitals, long-term acute care hospitals, long-term care centers, assisted living facilities, physician practices, retirement communities, and other retail and joint-venture businesses. CHRISTUS Health has facilities located in Texas, Louisiana, Utah, Georgia, Arkansas, Missouri, New Mexico, and Mexico.

CHRISTUS leaders who were rated by their followers manage business units with varying degrees of associate engagement. Associates who are highly engaged are especially important in healthcare as engaged associates are not only more apt to have

higher productivity and remain with the organization longer, they also contribute to higher quality outcomes and improved patient safety (Toto & Perkins, 2004).

Research Study Instruments

Three survey instruments were used to explore the hypotheses of the study. Data from CHRISTUS Health's Fall 2007 Press Ganey Culture of Engagement Index[®] was provided to the researcher by an independent third-party to rank order eligible departments for selection in the sample population. Data from the leadership style survey, the demographic questionnaire, and the individual Press Ganey Culture of Engagement Index[®] was collected by the researcher.

Press Ganey Culture of Engagement Index[®]

Associate engagement was measured using the Press Ganey Culture of Engagement Index[®]. The index assesses the workplace culture of an organization and how well associates have the opportunity to personally engage (Bavin & Coshow, 2007). The index consists of 10 questions that were rated on a four-point Likert scale from 1-4. The rating scale consisted of 1=Strongly disagree, 2=Tend to disagree, 3=Tend to agree, and 4=Strongly agree.

The responses were converted to a score from 0-100 to replicate the methodology used by Press Ganey Associates: (a) strongly agree, 100, (b) tend to agree, 66.9, (c) tend to disagree 33.3, and (d) strongly disagree, 0. The score from each question was combined and expressed as a mean score. Scores were then compared to the Press Ganey Associates database to determine the percentile ranking for the department engagement classification. A score at the 80th percentile or above are considered highly engaged. A score at the 20th percentile or below indicates disengagement. Scores between the 20th

and 80th percentiles fall in a group called the “massive middle.” The middle is group is neither engaged nor disengaged.

The Press Ganey Culture of Engagement Index[®] was developed by Press Ganey Associates in 2007. Press Ganey Associates used Factor Analysis and a Cronbach’s Alpha test to measure reliability and validity. Due to the proprietary nature of the Press Ganey Culture of Engagement Index[®], prior agreement with Press Ganey Associates to use the index included agreement by the researcher that the psychometric properties of the Press Ganey Culture of Engagement Index[®] would not be published or presented.

There are no published criticisms of the Press Ganey Culture of Engagement Index[®]. There are a total 393 healthcare organizations that have been using the index since 2007.

Multifactor Leadership Questionnaire

The Multifactor Leadership Questionnaire (MLQ) was used to measure leadership style. The MLQ is the most widely used instrument to measure the leadership constructs of the Full Range Leadership Model developed by Bass and Avolio (2004). The MLQ measures transformational, transactional, and passive/avoidant leadership styles as well as the leadership outcomes of extra effort, effectiveness, and satisfaction.

The MLQ Rater Form (5X-Short) was used in this study. The Rater Form consisted of 45 questions that were rated on a 5 point Likert scale. The scale ranged from 0-4, with the rating scale consisting of 0=Not at all, 1=Once in a while; 2= Sometimes; 3 = Fairly often, and 4=Frequently, if not always. The 45 questions measured by the MLQ Rater Form (5X-Short) comprised 12 subscales. The first 5 subscales comprise transformational leadership and are as follows: Idealized Influence (Attributed),

Idealized Influence (Behavior), Inspirational Motivation, Intellectual Stimulations, and Individual Consideration. Transactional leadership subscales consist of Contingent Reward, and Management by Exception (Active). Passive/Avoidant Leadership subscales are Management-by-Exception (Passive) and Laissez-faire Leadership. The final 3 subscales measure the outcomes of leadership as identified as Extra Effort, Effectiveness, and Satisfaction.

The MLQ Technical Report (Bass & Avolio, 2004) reported descriptive statistics and reliabilities for the MLQ 5X. The scores are based on ratings from 9 samples ($N=2,154$) and reliabilities ranged from .74 to .94 for each leadership factor scale. The technical report asserts “all of the scales’ reliabilities were generally high, exceeding standard cut-offs for internal consistency recommended in the literature” (Bass & Avolio, 2004).

Sampling Plan

The Multifactor Leadership Questionnaire Form 5X, the Press Ganey Culture of Engagement Index[®], and a demographic questionnaire were combined to form a research packet which was administered to a sample of CHRISTUS Health Associates. Associates who were employed by CHRISTUS in either full or part-time roles and whose departments participated in the Fall 2007 Press Ganey Culture of Engagement Index[®], were eligible for the study.

The sample for the study was selected by ranking the 928 departments that participated in the Fall 2007 Press Ganey Culture of Engagement Index[®] by percentile ranking. The top and bottom 100 departments were selected for the study. The top 100 departments were named “engaged” and the bottom 100 departments were named

“disengaged.” A random sample of associates was selected from the 200 departments consisting of 1,215 Associates. The sampling controlled for several variables that are known to impact a follower’s perception of his or her leader’s leadership style. These included age, gender, education, ethnicity, location, tenure with the organization, tenure with the leader, department type, team size, and salary.

Operational Definitions for Dependent Variable

1. Engagement referred to the mean score of the 10 questions from the Press Ganey Culture of Engagement Index[©].

Operational Definitions for Independent and Control Variables

1. Transformational leadership referred to the mean score of the 20 questions rated by respondents on the Multifactor Leadership Questionnaire 5X from the transformational leadership subscales.
2. Transactional leadership referred to the mean score of the 8 questions rated by the respondents on the Multifactor Leadership Questionnaire 5X from the transactional leadership subscales.
3. Passive leadership referred to the mean score of the 8 questions rated by the respondents on the Multifactor Leadership Questionnaire 5X from the passive leadership subscales.
4. Age referred to the respondent’s age as reported in the human resource information system as of January 1, 2008.
5. Gender referred to male or female as reported from the human resources information system.

6. Education referred to highest education completed as reported by respondents on the demographic questionnaire. Education categories included high school, associate degree, bachelors degree, and graduate degree.
7. Ethnicity referred to the ethnic group as reported from the human resources information system. Ethnic groups included Hispanic, White, Black/African American, Asian, and Other.
8. Location referred to the State that the respondents facility was geographically located in as reported from the human resources information system. State categories included Louisiana, Texas, and Utah.
9. Tenure with the organization referred to the number of years the respondents had worked for CHRISTUS Health as reported from the human resources information system as of January 1, 2008.
10. Tenure with the leader referred to the number of years the respondents had worked for the leader they were rating as self reported from the demographic survey.
11. Department type referred to a department category the respondents were working in as self reported on the demographic survey. Department type categories included Nursing, other Clinical (Laboratory, Radiology, PT, OT, etc), Support Services (Housekeeping, Maintenance, Security, etc.), and Fiscal and Administrative (Administration, Management, Health Information, Finance, etc.).
12. Team size referred to the number of associates in the department as reported from the human resources information system as of January 1, 2008.
13. Salary referred to the annual salary of the respondents as reported from the human resources information system as of January 1, 2008.

Research Design

This study used descriptive statistics to examine the characteristics of the respondents and the respondents' departments. Scores of individual *t* tests, Pearson's correlation, chi square tests, binomial and multiple regression analysis were used to examine the relationship between the dependent variable of associate engagement and the independent variables of leadership style, age, gender, ethnicity, education, location, tenure with the organization, tenure with the leader, department type, team size, and salary.

Research Areas

Three primary research areas were explored. Since there is no scholarly literature for the Press Ganey Culture of Engagement Index[®], the first research area was a factor analysis comparing the factor structures of the Press Ganey Culture of Engagement Index[®] and the Multifactor Leadership Questionnaire. The second area was at the department level. This research area included the departments that respondents worked in and the departments were classified as either engaged or disengaged. The third research area was at the individual respondent level and examined associate engagement level.

Research Area One – Instrument Analysis

Null Hypothesis

An explanatory factor analysis with varimax rotation was conducted in research area one.

H₀1: There is no difference in the factor structures of the Press Ganey Culture of Engagement Index[®] and the Multifactor Leadership Questionnaire.

Research Area Two - Department Level

An analysis was performed in Research Area Two using department engagement classification as the criterion variable. General differences were found using separate *t* tests and then binomial regression.

Null Hypotheses

- H₀2: There is no relationship between department engagement classification and leader transformational scores when controlling for follower age, gender, ethnicity, education, location, tenure with the organization, tenure with the leader, department type, team size, and salary.
- H₀3: There is no relationship between department engagement classification and leader transactional scores when controlling for follower age, gender, ethnicity, education, location, tenure with the organization, tenure with the leader, department type, team size, and salary.
- H₀4: There is no relationship between department engagement classification and leader passive scores when controlling for follower age, gender, ethnicity, education, location, tenure with the organization, tenure with the leader, department type, team size, and salary.

Research Area Three – Individual Level

An analysis was performed in Research Area Three using individual engagement level as the criterion variable.

Null Hypotheses

- H₀5: There is no relationship between associate engagement and leader transformational scores when controlling for age, gender, ethnicity, education, location, tenure with the organization, tenure with the leader, department type, team size, and salary.
- H₀6: There is no relationship between associate engagement and leader transactional scores when controlling for age, gender, ethnicity, education, location, tenure with the organization, tenure with the leader, department type, team size, and salary.
- H₀7: There is no relationship between associate engagement and leader passive scores when controlling for age, gender, ethnicity, education, location, tenure with the organization, tenure with the leader, department type, team size, and salary.

Procedure

CHRISTUS Health was contacted to obtain permission to conduct a study and obtain associate demographic information and department Press Ganey Culture of Engagement Index[®] data from human resource records and Press Ganey Associates survey results. The participants selected were employed by CHRISTUS Health either full or part-time and worked in departments that participated in the Fall 2007 Press Ganey Culture of Engagement Index[®].

Participants received research packets that were mailed to their home address of record from CHRISTUS Health's human resource information system. Participants were randomly selected by a computerized algorithm from the eligible departments. A postage-paid return envelope was included in the research packet with a return address of the researcher. All associates were selected from departments with a size of 6 or less

associates. Twenty percent of associates were randomly selected from departments with a size of greater than 6 associates. Participants were asked to complete the MLQ Short Form 5X, the Press Ganey Culture of Engagement Index[®], and a short demographic survey that included education, department type, and tenure with the leader. The control variables of age, gender, ethnicity, location, tenure with the organization, team size, and salary were provided by the Human Resource Information System and were provided only to the researcher through confidential communications. Names of participants were not associated with any of the final data for the study to protect the confidentiality of the respondents.

The research packets were mailed to participants in March, 2008. To accommodate the request of CHRISTUS Health, a second mailing of the research packet to participants who had not responded was not able to be sent until after April 21, 2008 as the annual associate satisfaction survey process was underway. The second research packet was mailed during late April and early May of 2008, with reminder postcards sent three days after the second mailing.

The first research packet sent to the 1,215 associates selected as the sample population yielded a return of 116 surveys. The second mailing and reminder postcards yielded another 82 surveys for a total of 198 returned survey packets. Eight of the 198 surveys were unusable. The 190 usable surveys generated a response rate of 16%.

The data collected from the MLQ, the Press Ganey Culture of Engagement Index[®], and the demographic variables were entered into an SPSS database for analysis. The dependent and independent variables were evaluated using *t*-tests, binary regression, chi-square analysis, correlation analysis, and multiple regression statistical techniques.

Ethical Considerations

Participants for the study were taken from a large, catholic healthcare system known as CHRISTUS Health. Permission from Legal and Governance and Human Resources at CHRISTUS Health was obtained prior to the research being conducted. Additionally, a signed letter of approval/cooperation was obtained from the President/CEO of CHRISTUS Health and communicated to key leaders throughout the organization. Permission from Mindgarden, Inc. and Press Ganey Associates was granted for use of the Multifactor Leadership Questionnaire and the Press Ganey Culture of Engagement Index[®] respectively. The study and research instruments were approved by Our Lady of the Lake's Institutional Review Board.

A formal consent form describing the research study was mailed to all participants in the research study packet and the consent form explained all procedures the researcher was taking to conduct the study. Contact information for the researcher and the Dissertation Chair were provided on the consent form. The consent form met the requirements under Federal Policy for the Protection of Human Subjects requiring full disclosure of the study, purpose of the study, description of procedures used, expected duration of the study, description of any foreseeable risks, a statement that no costs to the participant or financial benefit to the researcher were incurred, assurance of confidentiality, and an explanation that the study was voluntary.

CHAPTER FOUR

RESULTS

Descriptive Statistics

Follower Demographic Variables

Study participants included associates from CHRISTUS Health from departments that were in the top and bottom 100 departments ranked by the Fall, 2007 Press Ganey Culture of Engagement Index[®]. Participants voluntarily answered and returned a research packet consisting of a demographic survey, the Multifactor Leadership Questionnaire (Bass & Avolio, 2004), and the Press Ganey Culture of Engagement Index[®] (Bavin & Crowshow, 2007). Some of the participant demographic and control variables were collected from the CHRISTUS Health Human Resources Information System in compliance with confidentiality practices of CHRISTUS Health.

The purpose for administering the Multifactor Leadership Questionnaire and the Press Ganey Culture of Engagement Index[®] was to allow the participants to rate their perception of their leader's leadership style and to assess the participant's own level of engagement. The demographic variables were collected as control variables.

Table 1 provides the descriptive statistics for the total survey respondents by the top 100 (engaged) and bottom 100 (disengaged) departments.

Table 1

Surveys by Top 100 or Bottom 100

Engaged or Disengaged	N	Percent
Engaged	105	55.3
Disengaged	85	44.7
Total	190	100.0

Figure 2 provides a graphical representation of the distribution by engaged or disengaged departments.

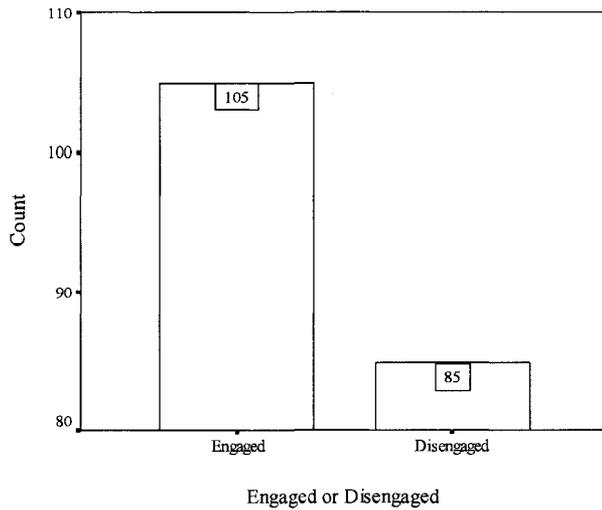


Figure 2. Surveys by engaged or disengaged departments.

Figure 3 provides a graphical representation of the distribution by age. The respondents mean age was 45.5 years with a standard deviation of 11.29. The age of the respondents ranged from 22 to 69 years of age.

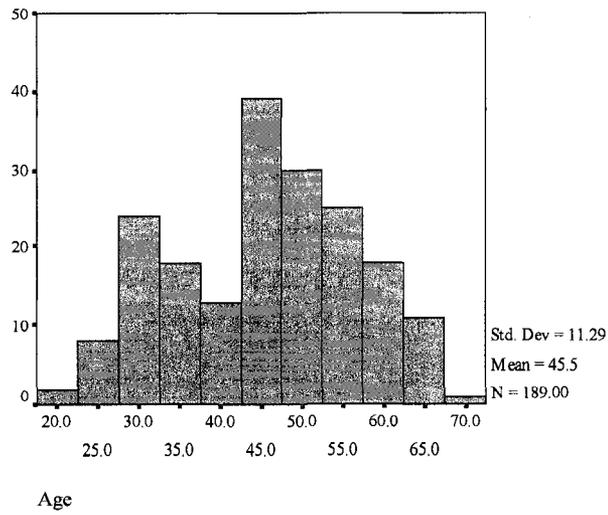


Figure 3. Distribution by age.

Table 2 provides the descriptive statistics of the total survey respondents by gender. Respondents consisted of 190 participants. More females (80.5%) than males (19.5%) responded to the survey.

Table 2

Surveys by Gender

Gender	N	Percent
Male	37	19.5
Female	153	80.5
Total	190	100.0

Figure 4 provides a graphical representation of the distribution by gender.

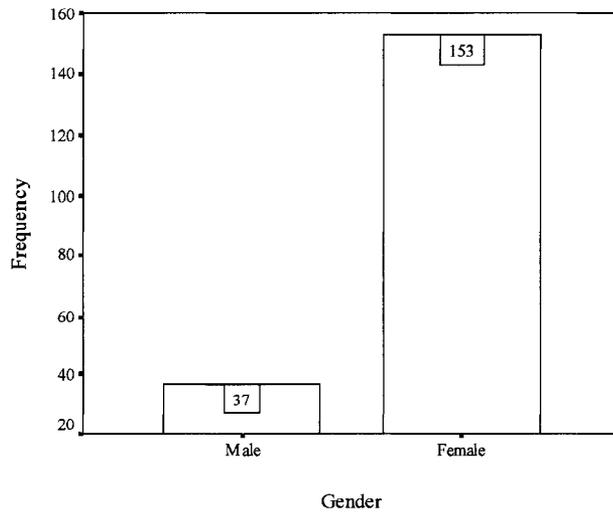


Figure 4. Distribution by gender

Table 3 provides the descriptive statistics of the total survey respondents by ethnicity. Most respondents were White (62.1%), followed by Hispanic (24.2%), Black (8.9%), and Asian (9%).

Table 3

Surveys by Ethnicity

Ethnicity	N	Percent
Hispanic	46	24.2
White	118	62.1
Black	17	8.9
Asian	9	4.7
Total	190	100.0

Figure 5 provides a graphical representation of the distribution by ethnicity.

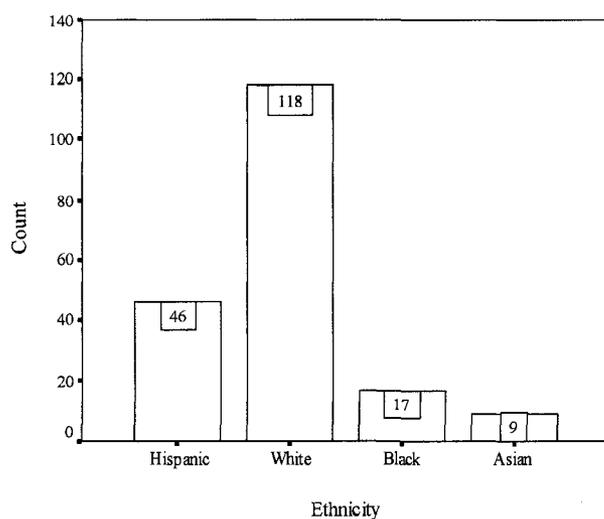


Figure 5. Distribution by ethnicity.

Table 4 provides the descriptive statistics of the total survey respondents by education. Most respondents had a bachelors degree (34.2%), followed by an associate degree (25.8%), a high school degree (25.3%), and a graduate degree (14.2%). One respondent did not report education.

Table 4

Surveys by Education

Type of Education	N	Percent
High School	48	25.3
Associate Degree	49	25.8
Bachelors Degree	65	34.2
Graduate Degree	27	14.2
Sub-Total	189	99.5
Not Reported	1	.5
Total	190	100.0

Figure 6 provides a graphical representation of the distribution by education.

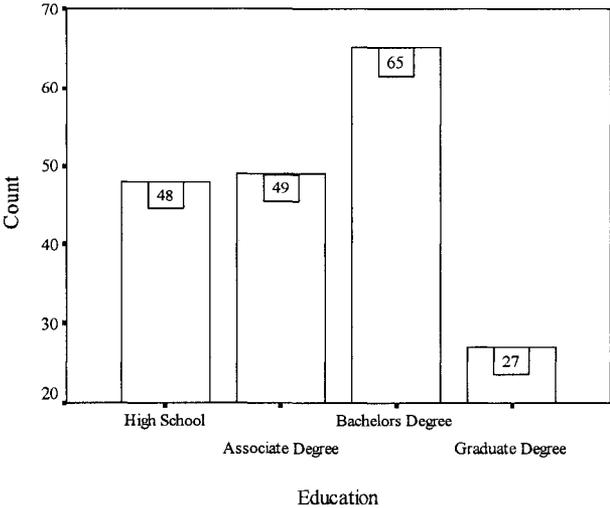


Figure 6. Distribution by education.

Table 5 provides the descriptive statistics of the distribution for department type. Most respondents were from departments classified as Nursing (42.1%), followed by Fiscal and Administrative (30.5%), Other Clinical (16.8%), and Support Services (10.5%).

Table 5

Surveys by Department Type

Department Type	N	Percent
Nursing	80	42.1
Other Clinical	32	16.8
Support Services	20	10.5
Fiscal & Administrative	58	30.5
Total	190	100.0

Figure 7 provides a graphical representation of the distribution by department type.

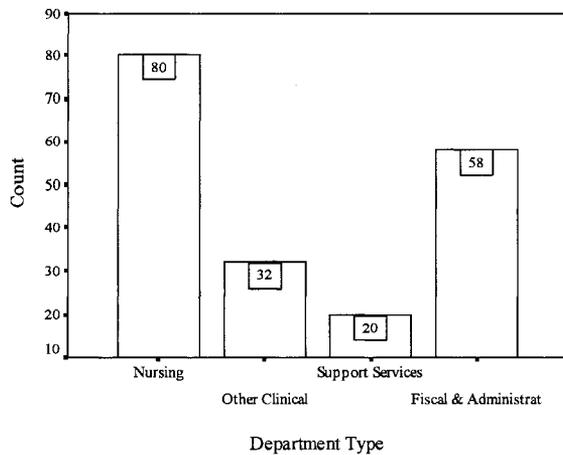


Figure 7. Surveys by department type.

Figure 8 provides a graphical representation of the distribution by tenure with CHRISTUS. The respondents mean tenure was 8.7 years with a standard deviation of 8.08 and a skewness of 1.30. The tenure of respondents ranged from 0 to 37 years.

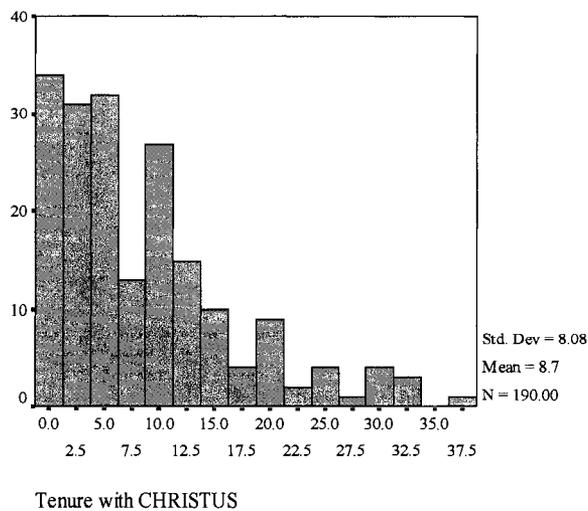


Figure 8. Surveys by tenure with CHRISTUS.

Figure 9 provides a graphical representation of the distribution by tenure with the respondent’s leader. The respondents mean tenure with the leader was 3.4 years with a

standard deviation of 3.39 years and a skewness of 1.46. Tenure with respondent leader ranged from 0 to 15 years. The mode was 1 year and the median was 2 years.

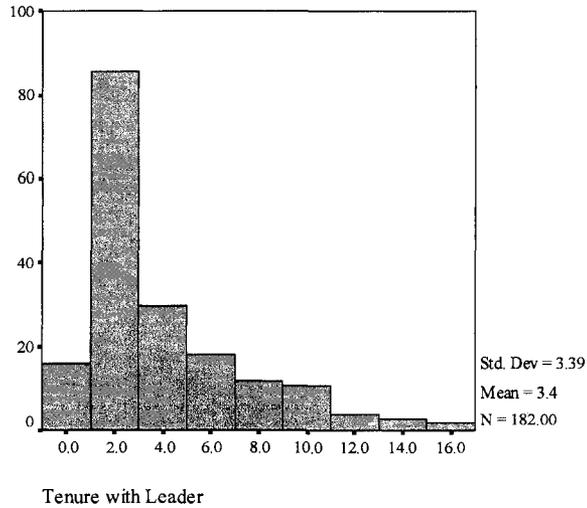


Figure 9. Surveys by tenure with leader.

Figure 10 presents a graphical representation of the distribution by team size. The respondents mean team size was 30 team members with a standard deviation of 26.97. Team size ranged from 2 team members to 125 team members.

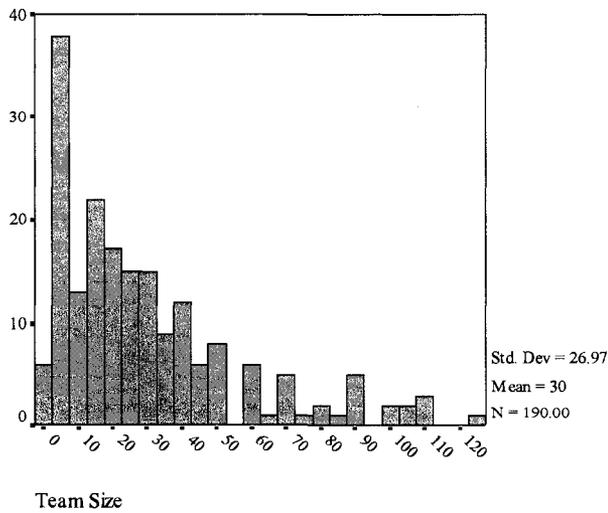


Figure 10. Surveys by team size.

Figure 11 presents a graphical representation of the distribution by salary. The respondents' mean salary was \$45,127.90 with a standard deviation of \$22,327.56.

Salaries ranged from \$2,745 to \$114,365

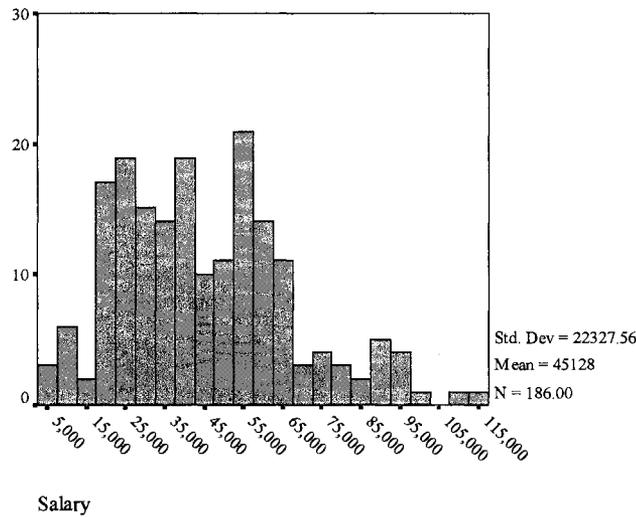


Figure 11. Surveys by salary.

Table 6 provides the descriptive statistics of the distribution for location. More respondents were from Texas (84.9) than from Louisiana (15.15)

Table 6

Surveys by State

State	N	Percent
Texas	158	84.9
Louisiana	28	15.1
Total	186	100

Note. 4 respondents from Utah excluded.

Figure 12 provides a graphical representation of the distribution by the respondents location.

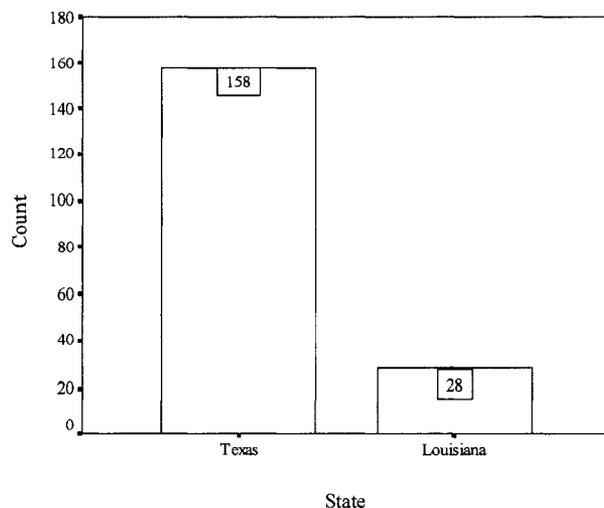


Figure 12. Surveys by location.

Dependent Variable

Figure 13 provides a graphical representation of the distribution by the respondents Press Culture of Engagement Index[®] raw score. The mean score was 61.80 with a standard deviation of 28.37 and a skewness of -.53. Respondents Press Ganey Culture of Engagement Index[®] raw score ranged from 0 to 100.

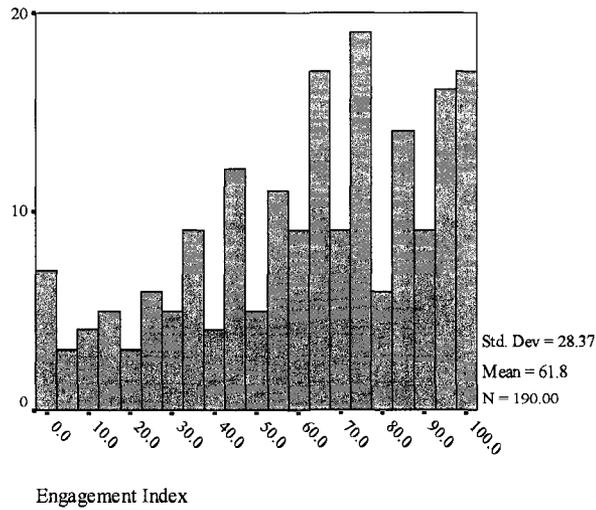


Figure 13. Surveys by culture of engagement index raw score.

Leadership Variables

Figure 14 provides the distribution of the transformational scores that the followers gave their leaders. The mean score was 2.6, the standard deviation 1.05, and the skewness was -.76.

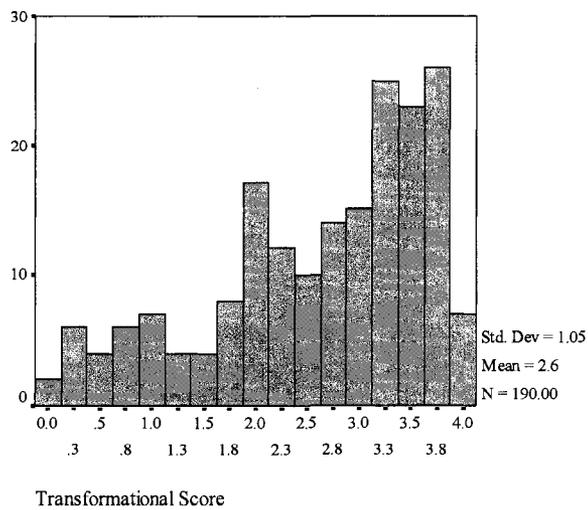


Figure 14. Distribution of transformational scores.

Figure 15 provides the distribution of the transactional scores that the followers gave their leaders. The mean was 2.36, the standard deviation .89 and the skewness was -.32.

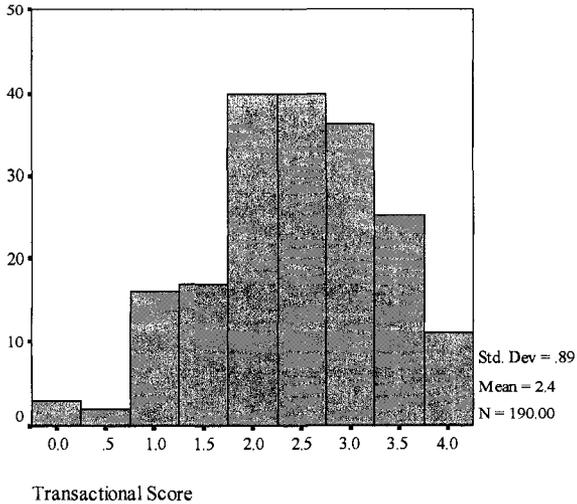


Figure 15. Distribution of transactional scores.

Figure 16 provides the distribution of the passive scores that the followers gave their leaders. The mean was 2.63, the standard deviation 1.35 and the skewness was -.68.

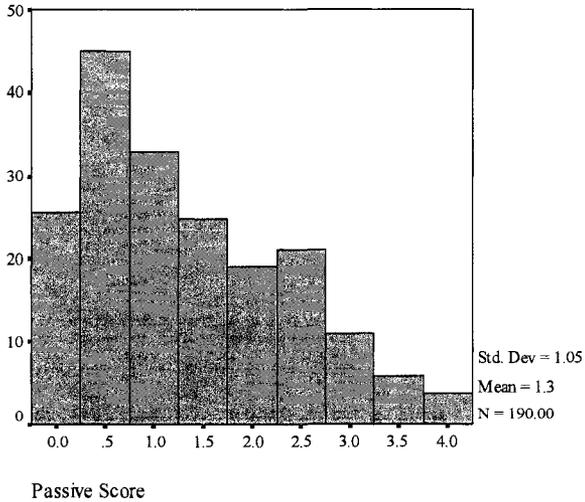


Figure 16. Distribution of passive scores.

Figure 17 provides the distribution of the effectiveness scores that the followers gave their leaders. The mean was 2.66, the standard deviation 1.25, and the skewness was $-.68$.

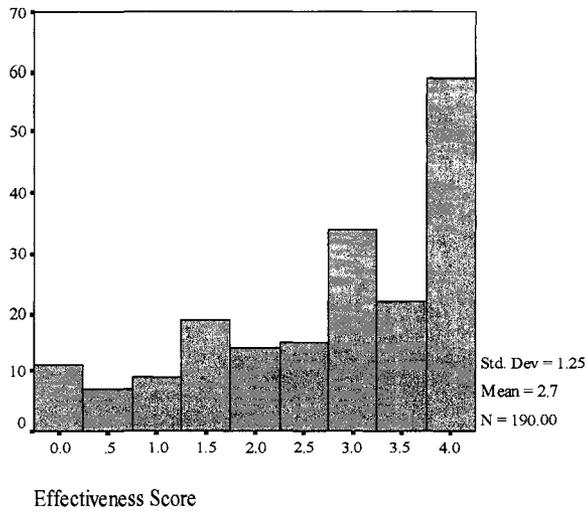


Figure 17. Distribution by effectiveness score.

Figure 18 provides the distribution of the satisfaction scores that the followers gave their leaders. The mean was 2.63, the standard deviation 1.35, and the skewness was $-.68$.

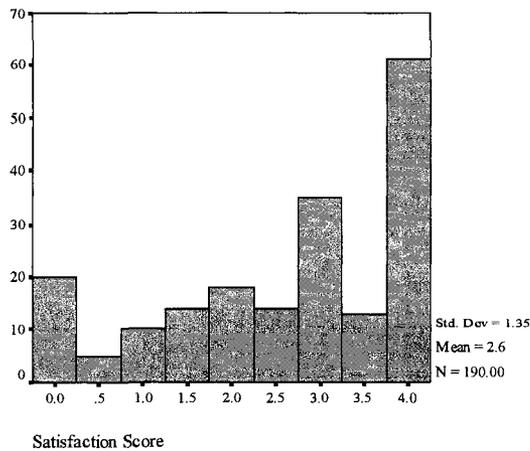


Figure 18. Distribution by satisfaction score.

Figure 19 provides the distribution of the extra effort scores that the followers gave their leaders. The mean was 2.54, the standard deviation 1.05, and the skewness was -.64.

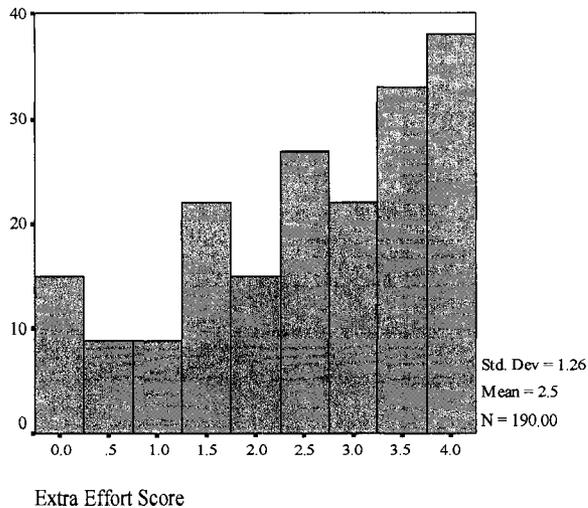


Figure 19. Distribution by extra effort score.

Results

Research Area One – Instrument Analysis

Null Hypothesis One

There is no difference in the factor structures of the Culture of Engagement Index and the Multifactor Leadership Questionnaire.

The Multifactor Leadership Questionnaire measures questions specific to one's leader and the Press Ganey Culture of Engagement Index[©] measures questions specific to one's leader, one's senior leader, and the workplace culture. The instruments appear to be measuring different constructs. The question must be asked, "Are the two instruments really measuring different things?" Due to this question and because the Press Ganey

Culture of Engagement Index[®] has not been used as extensively as the Multifactor Leadership questionnaire, a confirmatory factor analysis was run comparing the factor structures of both instruments. The results of the exploratory factor analysis using varimax rotation found 5 components from the 10 questions of the Press Ganey Culture of Engagement Index[®] and 36 questions from the Multifactor Leadership Questionnaire.

Of the 5 components, component 1 had an eigenvalue of 12.53 and accounted for 27.42% of the variance. Individual measures of transformational leadership uniquely loaded on component 1 (eigenvector + or - .5). The second component had an eigenvalue of 9.04 and explained an additional 19.67% of the variance. All ten questions from the Press Ganey Culture of Engagement Index[®] loaded uniquely on component 2 (eigenvector + or - .5). Component 3 had an eigenvalue of 5.28 and explained an additional 11.48% of the variance. The questions on the Multifactor Leadership Questionnaire that measure passive leadership all uniquely loaded on component 3 (eigenvector + or - .5). Component 4 and 5 together added an additional 11% of the variance but few of the questions from the transactional measures as described by Bass and Avolio had eigenvalues greater than .5. The transactional questions were scattered across the two components. As a result of the exploratory factor analysis, questions related to transformational and passive leadership on the Multifactor Leadership questionnaire are quite different from all ten questions on the Press Ganey Culture of Engagement Index[®].

Research Area Two – Department Level

The second area of research examined was at the department level – engaged or disengaged departments.

Null Hypothesis Two, Three and Four

There is no relationship between department engagement score and leadership transformational, transactional, and passive scores when controlling for age, gender, ethnicity, education, location, tenure with the organization, tenure with the leader, department type, team size, and salary.

t test and Chi-square Analysis

As an initial analysis, a series of separate *t* tests were run comparing results of those respondents from the engaged departments and those from the disengaged departments on the continuous variables. Seven different variables were found to have significant differences. On average, respondents from engaged departments ($M = 2.80$) rated their leaders much higher on transformational leadership style ($t(188) = 2.75, p = .007$) than those respondents from disengaged departments ($M = 2.39$). Respondents from engaged departments ($M = 1.13$) rated their leaders much lower on passive leadership style ($t(188) = -2.46, p = .008$) than respondents from disengaged departments ($M = 1.49$). Respondents from engaged departments ($M = \$50K$) had much higher salaries ($t(184) = 3.67, p = .000$) than respondents from disengaged departments ($M = \$38K$). The team size ($t(188) = -3.42, p = .0001$) of respondents from engaged departments ($M = 24$) was much lower than the team size of respondents from disengaged departments ($M = 37$). Scores for effectiveness ($t(188) = 2.85, p = .005$) were higher for engaged departments ($M = 2.89$) than those of respondents from disengaged departments ($M = 2.38$). Scores for satisfaction with their leader ($t(188) = 3.02, p = .003$) was higher for respondents from engaged departments ($M = 2.89$) than those respondents from disengaged departments ($M = 2.31$). Extra effort scores ($t(188) = 2.92, p = .004$) were

higher for respondents from engaged departments ($M = 2.77$) than those from respondents from disengaged departments ($M = 2.25$).

Table 7 below shows the group statistics and t tests for the engaged versus disengaged departments by independent and control variables that were statistically significant.

Table 7

Group Statistics

Variable	E/D	N	Mean	Std. Deviation	Std. Error Mean	t	Sig.
Transformational Score	E	105	2.80	.94	.092	2.75	.007
	D	85	2.39	1.13	.123		
Passive Score	E	105	1.13	1.01	.099	-2.46	.008
	D	85	1.49	1.06	.115		
Salary	E	103	\$50k	23.3k	22.9K	3.67	.000
	D	83	\$38k	19.2k	21.5K		
Team Size	E	105	24.04	24.02	2.344	-3.42	.001
	D	85	37.14	28.75	3.118		
Effectiveness Score	E	105	2.89	1.11	.109	2.85	.005
	D	85	2.38	1.35	.146		
Satisfaction Score	E	105	2.89	1.21	.118	3.02	.003
	D	85	2.31	1.43	.156		
Extra Effort Score	E	105	2.77	1.11	.109	2.91	.004
	D	85	2.25	1.37	.148		

Note. E=Engaged, D=Disengaged

Chi-square analysis was computed for the categorical variables of gender, ethnicity, education, department type, and location. A Chi-square test was significant for location. $\chi^2 = (1, N = 186) = 9.92, p = .00$. There were more engaged respondents from

Louisiana than expected and fewer from Texas. Gender, ethnicity, education, and department type were not significant ($p > .05$).

Forward Conditional Binary Regression

Although the t tests and Chi-Square analysis found 9 variables that explained the differences between engaged and disengaged departments, these tests were completed by individual variables to gain an understanding of the relative importance of each independent and control variable. To determine which variables were important in predicting whether a respondent worked in an engaged or disengaged department, forward conditional binary regression analysis was conducted using all 9 variables simultaneously. Table 8 shows the results of the forward conditional binary regression analysis.

Table 8

Binary Regression Analysis for Predictor Variables

Model	B	S.E.	Wald	df	Sig	Exp(B)
1	.000(a)	.000	10.633	1	.001	1.000
2	.000(a)	.000	9.397	1	.002	1.000
	1.418(b)	.536	7.004	1	.008	4.128
3	.000(a)	.000	7.890	1	.005	1.000
	.012(b)	.006	3.843	1	.050	1.012
	1.225(c)	.545	5.047	1	.025	3.403

Note. (a) Salary, (b) Location, (c) Team Size

Team size ($\text{Exp}(\beta) = 3.403$, $p = .00$) was the strongest predictor of department type, followed by location ($\text{Exp}(\beta) = 1.012$, $p = .05$) and salary ($\text{Exp}(\beta) = 1.000$, $p = .03$). Respondents from engaged departments worked in smaller teams ($M = 24$) than those who worked in disengaged departments ($M = 37$), $t(188) = -3.42$, $p = .00$. Respondents from Louisiana tended to be more engaged than those from Texas, $X^2 = (1, N = 186) = 9.92$, $p = .00$. Those who worked in engaged departments ($M = \$50\text{K}$) had higher salaries than those in disengaged departments ($M = \$38\text{K}$), $t(184) = -2.46$, $p = .01$.

When leadership style and outcome scores are examined independently, they are significant predictors of whether a respondent works in an engaged or disengaged department. When all variables are looked at collectively, the variables of salary, team size, and location eclipse leadership in predicting where a respondent works and the most interesting finding was that leadership style did not matter.

Research Area Three – Individual Level

Null Hypothesis Five, Six, and Seven

There is no relationship between individual engagement score and leadership transformational, transactional, and passive scores when controlling for age, gender, ethnicity, education, location, tenure with the organization, tenure with the leader, department type, team size, and salary.

Correlation Analysis

As a preliminary analysis, a correlation matrix was run for the engagement index score of the individual and all of the continuous independent variables. Salary ($r = .22$, $p = .00$) was positively related to a respondent's engagement index score. Team size had a negative relationship with engagement index ($r = -.19$, $p = .01$). Transformational score

had a significant, positive relationship with engagement index ($r = .78, p = .00$).

Transactional score was positively related to engagement index ($r = .62, p = .00$). Passive score was negatively related to engagement index ($p = .00$). Effectiveness score was positively related to engagement index ($r = .68, p = .00$), as was satisfaction ($r = .73, p = .00$) and extra effort ($r = .75, p = .00$). Age, tenure with the organization, and tenure with the leader were not significant ($p > .05$).

Other variables that showed a relationship are as follows. Salary had a significant, negative relationship to team size ($r = -.17, p < .05$) and passive score ($r = -.15, p < .01$). Salary also had a significant, positive relationship with tenure with CHRISTUS ($r = .19, p < .05$), transformational score ($r = .21, p < .01$), transactional score ($r = .08, p < .01$) effectiveness score ($r = .20, p < .01$), satisfaction score ($r = .19, p < .01$), and extra effort score ($r = .20, p < .01$). Team size had a significant, negative relationship with transformational score ($r = -.22, p < .01$), effectiveness score ($r = -.21, p < .01$), satisfaction score ($r = -.20, p < .01$), and extra effort score ($r = -.22, p < .01$). Team size had a positive relationship with passive score ($r = .16, p < .01$). Age had a positive relationship with tenure with CHRISTUS ($r = .40, p < .01$) and tenure with the leader ($r = .24, p < .01$). Tenure with CHRISTUS had a positive relationship with tenure with the leader ($r = .37, p < .01$). Transformational score had a significant, positive relationship with transactional score ($r = .79, p < .01$), effectiveness score ($r = .95, p < .01$), satisfaction score ($r = .91, p < .01$), and extra effort score ($r = .89, p < .01$). Transformational score had a negative relationship with passive score ($r = -.73, p < .01$). Transactional score has a negative relationship with passive score ($r = -.51, p < .05$). Transactional score was positively related to effectiveness score ($r = .72, p < .01$),

satisfaction score ($r = .68, p < .01$), and extra effort score ($r = .67, p < .01$). Passive score had a significant, negative relationship with effectiveness score ($r = -.78, p < .01$),

satisfaction score ($r = .76, p < .01$), and extra effort score ($r = -.72, p < .01$).

Effectiveness score had a positive relationship with satisfaction score ($r = .95, p < .01$)

and extra effort score ($r = .91, p < .01$). Satisfaction score was positively related to extra

effort score ($r = .89, p < .01$). Table 9 displays the correlation matrix.

Table 9

Correlation Matrix and Descriptive Statistics for All Variables

Variables	1	2	3	4	5	6	7	8	9	10	11	12
1. Engagement Index	1.00											
2. Salary	.22	1.00										
3. Team Size	<i>-.19</i>	<i>-.17</i>	1.00									
4. Age	<i>-.06</i>	.00	<i>-.14</i>	1.00								
5. Tenure with CHRISTUS	.01	<i>.19</i>	<i>-.01</i>	.40	1.00							
6. Tenure with Leader	<i>-.01</i>	<i>-.08</i>	<i>-.03</i>	.24	.37	1.00						
7. Transformational Score	.78	.21	-.22	<i>-.10</i>	<i>-.01</i>	<i>-.02</i>	1.00					
8. Transactional Score	.62	.08	<i>-.04</i>	<i>-.06</i>	<i>-.09</i>	<i>-.10</i>	.79	1.00				
9. Passive Score	-.67	-.15	.16	<i>.04</i>	<i>-.03</i>	<i>.10</i>	-.73	-.51	1.00			
10. Effectiveness Score	.77	.20	-.21	<i>-.05</i>	<i>-.03</i>	<i>-.01</i>	.95	.72	-.78	1.00		
11. Satisfaction Score	.73	.19	-.20	<i>-.03</i>	<i>-.03</i>	<i>-.01</i>	.91	.68	-.76	.95	1.00	
12. Extra Effort Score	.75	.20	-.22	<i>-.02</i>	<i>-.01</i>	<i>-.02</i>	.89	.67	-.72	.91	.89	1.00

Note. Bolded correlations significant at .01, italicized significant at .05.

Multiple Regression Analyses

Associate Engagement. The results of a multiple regression analysis using all of the independent variables indicated that how transformational the respondent rated the

leader was an extremely strong predictor of how engaged the respondent was ($R^2 = .61, p = .00$), ($\beta = 16.52, r_p = .56, p = .00$). How passive the respondent rated the leader was also a predictor of how engaged a respondent was ($\Delta R^2 = .02, p = .00$) ($\beta = -6.21, r_p = -.246, p = .00$). Table 10 provides the results of the multiple regression analysis.

Table 10

Multiple Regression Analysis for Engagement Index

Model	R	R Square	Std. Error of The Estimate	R Square Change	df1	df2	Sig.
1	.780(a)	.608	17.8167	.608	1	184	.000
2	.795(b)	.632	17.3150	.024	1	183	.001

Note: (a) Transformational Score, (b) Transformational Score, Passive Score

Follower Rating of Leader Effectiveness. The results of a multiple regression analysis using all of the independent variables indicated that how transformational the respondent rated the leader was also an extremely strong predictor of how effective the respondent rated the leader ($R^2 = .95, p = .00$), ($\beta = 1.12, r_p = .87, p = .00$). How passive the respondent rated the leader was also a predictor of how effective a respondent rated the leader ($\Delta R^2 = .02, p = .00$) ($\beta = -.24, r_p = -.40, p = .00$). Table 11 provides the results of the multiple regression analysis.

Table 11

Multiple Regression Analysis for Effectiveness Score

Model	R	R Square	Std. Error of the Estimate	R Square Change	df1	df2	Sig.
1	.947(a)	.897	.401	.897	1	172	.000
2	.956(b)	.914	.368	.017	1	171	.000

Note. (a) Transformational Score, (b) Transformational Score, Passive Score

Follower Rating of Leader Satisfaction. The results of a multiple regression to predict follower satisfaction with the leader found that how transformational the respondent rated the leader was also an extremely strong predictor of how satisfied with the leader the respondent was ($R^2 = .82, p = .00$), ($\beta = .72, r_p = .77, p = .00$). How passive the respondent rated the leader improved the model by 2% ($\Delta R^2 = .02, p = .00$) ($\beta = -.25, r_p = -.38, p = .00$). How old the respondent was added an additional 1% ($\Delta R^2 = .01, p = .02$) ($\beta = .07, r_p = -.17, p = .00$). Table 12 provides the results of the multiple regression analysis.

Table 12

Multiple Regression Analysis for Satisfaction Score

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	df1	df2	Sig.
1	.905(a)	.819	.818	.571	.819	1	172	.000
2	.918(b)	.843	.842	.533	.024	1	171	.000
3	.921(c)	.848	.845	.526	.005	1	170	.024

Not.: (a) Transformational score, (b) Transformational Score, Passive Score, (c)

Transformational Score, Passive Score, Age

Follower Rating of Extra Effort. The results of a multiple regression to predict extra effort the follower would give for the leader indicated that how transformational the respondent rated the leader was also an extremely strong predictor of extra effort ($R^2 = .88$, $p = .00$, $\beta = .77$, $r_p = .733$, $p = .00$). How passive the respondent rated the leader was also a predictor of how much extra effort the respondent would give for the leader ($\Delta R^2 = .01$, $p = .01$, $\beta = -.16$, $r_p = -.21$, $p = .00$). Table 13 provides the results of the multiple regression analysis.

Table 13

Multiple Regression Analysis for Extra Effort Score

Model	R	R Square	Std. Error of the Estimate	R Square Change	df1	df2	Sig.
1	.884(a)	.781	.586	.781	1	172	.000
2	.889(b)	.791	.575	.010	1	171	.005

Note: (a) Transformational Score, (b) Transformational Score, Passive Score

CHAPTER FIVE

DISCUSSION AND CONCLUSIONS

Overview

This study examined the relationship between associate engagement and transformational leadership in a large, faith-based health system. The first area of study was to analyze the factor structure of the MLQ and the Press Ganey Culture of Workplace Engagement Index[®] to ensure the two instruments used in the research were indeed measuring different constructs. The second area of study was to examine the relationship between transformational and engagement scores of respondents working in the top 100 (engaged) and bottom 100 (disengaged) departments from an organization-wide engagement index ranking, when controlling for respondent age, gender, ethnicity, education, location, tenure with the organization, tenure with the leader, department type, team size, and salary. The final area of the study was to examine the relationship between transformational leadership and the individual respondent's engagement index score using the same control variables.

This chapter presents the study findings of all three areas of research. Comparison with previous research, limitations of the findings, and recommendations for future research will also be discussed.

Findings

There were no surprising findings in the first area of research. Since the MLQ measures leadership style and the Press Ganey Culture of Engagement Index[®] measures the workplace culture of an organization, it was not unusual to find that the two questionnaires did indeed measure different constructs. The findings found factors of

transformational leadership, transactional leadership, and passive leadership to be different. Engagement also was a separate factor from the full range model.

Research area two and three did not present such usual findings. As represented in figure 20 and figure 21, the results of both research area two and research area three present interesting findings. Analysis at the department level is quite different than at the individual level. When predicting whether an individual worked in an engaged or disengaged department, the predictor variables of salary, team size, and state mattered. Leadership style did not predict an engaged or disengaged department when all variables were analyzed collectively. However, at the individual respondent level, the associate's engagement index is predicted entirely by leadership style when all variables are analyzed together. Leadership style truly matters to individual human beings in the workplace. Figure 20 and 21 illustrate these findings.

Research Area Two Department Level		
Significant Independent Predictor Variables When Examined Individually	What Matters When All Variables Are Examined Collectively?	
Transformational	Team Size Location Salary	
Passive		
Effectiveness		
Satisfaction		
Extra Effort		
Team Size		
Location		
Salary		
Insignificant Independent Predictor Variables When Examined Individually		
Transactional		
Age		
Gender		
Ethnicity		
Education		
Tenure with Org.		
Department Type		
Tenure with Leader		

Figure 20. Research Area Two – Department Level Findings

Research Area Three Individual Level	
Significant Independent Predictor Variables When Examined Individually	What Matters When All Variables Are Examined Collectively?
Transformational	Transformational Score
Transactional	
Passive	Passive Score
Effectiveness	
Satisfaction	
Extra Effort	
Team Size	
Location	
Salary	
Individual Insignificant Predictor Independent Variables	
Age	
Gender	
Ethnicity	
Tenure with Org.	
Education	
Department Type	
Tenure with Leader	

Figure 21. Research Area Three – Individual Level Findings

Comparison with Previous Research

The findings of the study at the individual level were somewhat similar to prior research examining the relationship between transformational leadership and the engagement proxy variables of organizational commitment, perceived organizational support, organizational citizenship behavior, intent to leave, and job/supervisor satisfaction. Transformational leadership had a significant, positive relationship with the proxy variables for engagement in studies reviewed prior to this research. Transformational leadership also had a significant, positive relationship with engagement in this study. Passive leadership had a significant, negative relationship with engagement, just as in previous studies.

The control variables used in this study were found to be both similar and different with previous research. This study did not find age to be a significant control variable. Previous studies found younger employees to have higher trust in the organization and in their leader, while older employees had a higher commitment to the organization, as well as a higher intent to remain with the organization. Working in a healthcare facility takes much emotional, mental, and physical energy. The rewarding work of taking care of those in their time of greatest need creates work that is extremely meaningful. Even departments that support caregivers rather than providing direct patient care find the environment one that is truly rewarding. Given the meaningful work, followers of all ages have the same potential to be engaged and it seems the leader is who truly makes a difference in this work environment and influences engagement.

Prior research found minorities to have higher commitment and satisfaction to an organization. This research study found no relationship between engagement and

ethnicity for both department engagement classification and associate engagement level. CHRISTUS Health has had a commitment to developing and promoting ethnically diverse associates for several years. Education has also taken place around diversity and inclusion. It is possible that the commitment and training to diversity and inclusion has impacted the organization in a positive way where ethnic differences do not have a relationship to engagement level.

Although prior research found higher salaries to influence a follower's intent to remain in an organization, there was no relationship between salary and job satisfaction, or commitment. This study found salary to be a significant predictor of working in an engaged or disengaged department, but not a significant predictor of individual engagement level. The vast variance in salaries of the respondents is the most likely reason salary was found to be a significant control variable.

Previous research also found tenure with both the organization and the follower's leader to have a significant, positive relationship with the proxy variables for engagement. The greater the tenure with both the organization and the leader, the less likely the follower was to contribute ideas, feel able to voice concerns, and to have good relations with a supervisor. The more tenured followers also had a higher intent to remain with the organization. This study found no significant relationships between tenure with the organization or leader and engagement. As with the control variable of age, it is believed the work environment in healthcare is different than in other industries and followers at varying degrees of tenure all felt some level of committed to the organization and some amount of engagement.

Some of the control variables were consistent with prior research. Previous studies found gender and education not to have a relationship with the proxy variables of engagement. In this study, the same was true. Gender was not significant, nor was education. Team size in this study mirrored previous studies. The larger the team size, the lower the follower outcomes (i.e. involvement and engagement).

Although there was no prior research on the relationship between transformational leadership and engagement using department type as a control variable, it was a surprise to find that the type of department a respondent worked in did not influence the follower's engagement level. Since nursing departments are such a large percentage of the workforce in health systems and because they deal with such complex issues, it seemed probable that there would be differences in this department category.

There was no prior research related to transformational leadership and the proxy variables with location (state of work location) as a control variable. This study found those in Louisiana more engaged than those in Texas. Most respondents from Louisiana were from a facility that has been working on a culture change initiative for the past three years. The processes in place at that facility are aimed at increasing associate loyalty and engagement. Study results show the initiative is working.

Limitations of the Findings

The research for this study was conducted using associates from CHRISTUS Health who participated in the Fall, 2007 Press Ganey Culture of Engagement Index[®] that measured the workplace culture of engagement. The sample for the study was obtained by taking the top 100 and bottom 100 departments as rank ordered by the engagement survey and respondents were randomly selected from each of the 200 departments ($N =$

1,215). Although the sample was representative of the engaged ($n = 105$) and disengaged departments ($n = 85$), the study did not capture of perceptions of followers from the massive middle of the bell curve of overall department engagement index scores. Unless the respondents were representative of the entire CHRISTUS system, the study cannot be generalized to the population of CHRISTUS Health. The sample is limited to the workplace culture of CHRISTUS Health and may not be representative of other health care systems or other types of organizations.

Another limitation of the study was that it was a followership study. The study collected demographic and control variables on the followers rather than the leaders. Leadership characteristics were not used to analyze results and as such, differences in leadership characteristics cannot be extrapolated from the research data.

Recommendations for Further Research

Many studies have been conducted to examine the leader characteristics of transformational leaders. Since there are limited studies examining the relationship between transformational leadership and engagement, a study collecting leader demographic variables would provide insight into what leadership variables are attributed to leaders who can create a workplace culture that fosters a high level of engagement in followers.

This study found salary, team size, and location to be significant predictors of department type – engaged or disengaged. A study that examined these variables at a deeper level may provide an explanation as to why these variables mattered.

Since this study examined the perceptions of followers from the two tails of the bell curve of engaged and disengaged departments as the sample population, another

study using a random sample of the entire gamut of department engagement levels could validate the findings of this study. A study of this type may also show that there are differences in the perceptions of the “massive middle.”

This study did not capture job classification as a control variable. A study using job title may find that there are differences within department types. For example, nursing departments have a wide range of positions with varying degrees of responsibility, education, and skill level. A patient care technician/certified nursing assistant may have different perceptions than a bachelor’s prepared registered nurse.

Significant Contributions of the Study

The cost of healthcare to consumers continues to rise, as does the cost to operate health institutions. Associates are needed who are fully engaged rather than just satisfied with their job. Many organizations have begun to measure engagement because of the outcomes referenced at the beginning of this study. No other studies have examined the relationship between leadership style and follower engagement. This study answers the question “Does leadership style matter?” when looking at what can increase the engagement level of an associate. The answer to the question is “Yes.” Leadership style does, indeed, matter. In fact, leadership style is what truly matters to individuals when examining their level of engagement in the workplace.

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APPENDIXES

APPENDIX A

Our Lady of the Lake IRB Notice of Approval to Begin Research



NOTICE OF IRB APPROVAL TO BEGIN RESEARCH

Title of Project: An examination of the relationship between employee engagement and transformational leadership in a large, faith-based health system

Principal Investigator: Lisa Reynolds

Expedited Approval: This research has been approved and data collection can begin.

Full IRB Board Approval: This research has been approved and data collection can begin.

Approval Date: 1/23/08

Expiration Date: 1/23/09

Principal Investigator:

Upon receipt of this letter, you may now begin the research. This approval will expire on the date noted above.

Changes to the Protocol

Any changes (for example, to the study materials, procedures, or informed consent) to the original protocol must be submitted to the IRB for approval using the "Request for IRB Approval of Protocol Changes" form. This form is available on the IRB section of the Academic Affairs web page.

Continuing Review/End-of Project Review

The IRB is required to provide continuing review of research within one year of the date of the original review or the last continuing review. The Principal Investigator is responsible for completing the "IRB Continuing Review/End-of-Project Review Form" approximately 2 – 3 weeks prior to the expiration date. This form is available on the IRB section of the Academic Affairs web page.

Notice of Unanticipated Adverse Events

The Principal Investigator is responsible for submitting a written notification to the IRB reporting any unanticipated adverse events or problems involving risks to participants. The Principal Investigator is responsible for the accurate documentation, investigation and follow-up of all possible study-related adverse events and unanticipated problems involving risks to participants. Reports of all

adverse events or unanticipated problems must be retained in both the project files and the IRB office files for reference if needed.

Maintenance of Records

The Principal Investigator is required to maintain records of all correspondence relating to the use of human participants in research. Correspondence with the IRB, notices of approval, and original signed informed consent documents must be maintained in the Principal Investigator's records in a manner which ensures confidentiality. Research records must be kept for at least 3 years after completion of the research.

By beginning the research, the Principal Investigator acknowledges that he/she has read and understood the policies described in this document and agrees to comply with them.

Signature of IRB Chair

APPENDIX B

CHRISTUS Health Letters of Approval/Cooperation to
Endorse & Support Research Study



OUR MISSION: "To Extend the Healing Ministry of Jesus Christ"

DATE: January 7, 2008

TO: CHRISTUS Leadership Team

FROM: Thomas C. Royer, M.D. *Tom*

SUBJECT: **Dissertation Study**

Memorandum

At the Annual Leadership Retreat I spoke about the need for our organization to have transformational leaders to foster the timely and accelerated transformation of CHRISTUS Health. In addition, the initiation of the Innovations Institute is designed to encourage research and a spirit of innovative approaches to address the challenges we will continue to face. I am very excited to share with you a research study that will be conducted at CHRISTUS to examine transformational leadership on an in-depth level. Data from the research will allow us to align transformational leadership behaviors with all of our leadership development efforts.

As some of you may know, Lisa Reynolds, System Director of Organizational Effectiveness, has almost completed her Ph.D. in Leadership Studies at Our Lady of the Lake University in San Antonio. The final requirement for completion of her Doctorate Degree is for Lisa to conduct an original research study and complete her dissertation. Lisa will be conducting a study at CHRISTUS entitled "An Examination of the Relationship between Employee Engagement and Transformational Leadership in a Large, Catholic, Faith-Based Health System."

The study will consist of a sample of 1,000 Associates who will rate their leader's behaviors using the Multifactor Leadership Questionnaire. The questionnaire provides information on the leader's primary leadership style (transformational, transactional, or passive). The selected Associates will also complete the 10 question Engagement Index to correlate their current engagement with demographics that will show the correlation between engagement, perceived leadership style, and the demographics collected.

I believe the research findings will complement our accelerated Journey to Excellence. I ask your support of this study by informing your leadership team about the research, its value to CHRISTUS, and by your team encouraging the selected Associates to participate. Their participation will help us increase our effectiveness as a leader as we focus on transforming ourselves and our organization.

cc: Mary Lynch, SVP HR Services
Lisa Reynolds, System Director - OE



OUR MISSION: "To Extend the Healing Ministry of Jesus Christ"



Memorandum

TO: OLLU Institutional Review Board

FROM: Mary T. Lynch, Senior Vice President
Human Resource Services
(Signed Copy on File)

RE: Leadership Study for Dissertation Requirement

DATE: October 10, 2007

This memorandum is to inform you that Lisa M. Reynolds, System Director of Organizational Effectiveness at CHRISTUS Health, has the permission of the organization to conduct a cross-sectional survey study on leaders and Associates of CHRISTUS Health to meet the requirements of her dissertation. Lisa is a Ph. D. candidate in the Leadership Studies program at your institution.

Lisa's proposed dissertation will examine the relationship between leadership style and Associate engagement and Lisa will be administering two survey instruments to a group of Associates selected by stratified random sample. Participants of the study will be provided with informed consent prior to participation.

If you need additional information, please contact me at 713-680-4860.

APPENDIX C

Statement of Informed Consent



Consent Form

Dear CHRISTUS Associate:

My name is Lisa Reynolds, a Doctoral Candidate at Our Lady of the Lake University, San Antonio, TX and the System Director of Organizational Effectiveness at CHRISTUS Health.

I am requesting your help in completing my doctoral dissertation. I am conducting a research study that will investigate the correlation between transformational leadership and Associate engagement. You are invited to participate in this study. The information in this form is meant to help you decide whether or not to take part. If you have any questions, please contact me at the number provided on this form.

You will need to complete a demographic survey and two questionnaires which will take approximately 20 minutes. The first questionnaire is the Multifactor Leadership Questionnaire (MLQ). This instrument will ask you to rate your direct supervisor. The second questionnaire is the Press Ganey Workplace Culture of Engagement Index. This instrument will ask you to rate your perception of your workplace engagement. You may have recently answered the Engagement index last fall. In order to correlate your engagement score with your perception of your leader, you will need to rate the short 10-question engagement index once again.

There are no known risks to you as a participant of this research study. You are not expected to gain any benefit from this study. However, this study will add valuable information to the existing literature on engagement and leadership. My research study will also provide CHRISTUS Health with information that can be used in leadership development programs that are designed to cultivate more effective leaders. There is no cost to you to be in this research study.

The information collected in this study will be kept strictly confidential. The data will be collected for analysis and no one specific individual's score will be revealed in any way. To assure complete anonymity and protection, your name will not appear on any of the survey instruments, analysis, or final research documentation.

Your participation in this research is completely voluntary. If at any time you feel uncomfortable participating in the study and do not wish to proceed, please feel free to discontinue your participation.

The results will help CHRISTUS develop more effective leaders. If you participate, please complete the demographic questions, the MLQ, and the Engagement Index and return them together in the postage-paid envelope.

If you have any questions or concerns during or after this research study, you may contact:

Researcher: Lisa Reynolds
 E-mail: lisa.reynolds@christushealth.org
 Phone: 713-680-4827

Faculty Advisor: Dr. Mark Green
 E-mail: greem@lake.ollusa.edu
 Phone: 210-434-6711 ext#2298

If you have any questions regarding your rights as a participant, you can contact the researcher or Our Lady of the Lake Institutional Review Board at 210-434-6711, ext#2489, or grahl@lake.ollusa.edu

I understand that by returning the enclosed surveys that I am agreeing to the following statement: I have read this consent form and agree to voluntarily participate in this research study.

APPENDIX D

Press Ganey Culture of Workplace Engagement Index©

And Demographic Information

Culture of Workplace Engagement Questionnaire

Please respond to all questions. For each statement, please make an X in the column that best represents your feelings.

Question	Strongly Agree	Tend to Agree	Tend to Disagree	Strongly Disagree
I am encouraged to come up with better ways of meeting customers' needs.				
My work provides me an opportunity to be creative and innovative.				
My work group is asked for opinions before decisions are made.				
I have opportunities to influence policies and decisions that affect my work.				
Excellent performance is recognized here.				
My supervisor provides coaching that helps me achieve my goals.				
My supervisor recognizes my ideas and encourages my involvement.				
My supervisor encourages me to find better ways to do things.				
Senior leadership really listens to employees.				
The reasons for the current staffing pattern in my department have been explained clearly to me.				

Used with permission from Press Ganey Associates, Inc.

Demographic Data

Please respond to all questions. Check the appropriate response or fill in blank as appropriate.

- Highest education completed:
 - High School Associate Degree Bachelors Degree
 - Graduate Degree Doctoral Degree

2. Department Type:
 - Nursing
 - Other Clinical (Lab, Radiology, PT, OT, etc)
 - Support Services (Housekeeping, Maintenance, Security, etc)
 - Fiscal and Administrative (Administration, Management, Health Information, Finance, etc)

3. How many years have you worked for the leader you are rating? _____



404 Columbia Place
South Bend IN 46601

February 1, 2008

Lisa M. Reynolds
CHRISTUS HEALTH

Re: Use of the Press Ganey Culture of Engagement Index Questions

Dear Lisa,

Your use of the Press Ganey Culture of Engagement Index questions for your dissertation project is approved, under the following conditions:

- (1) Press Ganey will be properly cited in any and all presentations of this data;
- (2) There will be no monetary or commercial benefit from the use of our questions;
- (3) The psychometric properties of our Culture of Engagement Index will not be published or presented;
- (4) You promise to provide Press Ganey with a copy of any write-up of data that result from the use of our questions (e.g., dissertation, internal report, manuscript, article, poster presentation, conference presentation, etc.);
- (5) This permission is granted for this study only as described and is valid for the time period identified in the description of the study; any additional studies would require separate permission.

We look forward to seeing the results of your analysis and wish you the best of luck completing your research.

Best regards,

(Signed Copy on File)
Suzanne M. Coshow, PhD
Research Associate
Research & Development

APPENDIX E

Sample of Multifactor Leadership Questionnaire (MLQ)

Rater Form (5x-Short)

SAMPLE
Multifactor Leadership Questionnaire
Rater Form (5X-Short)

This Questionnaire is to describe the leadership style of your direct supervisor, as you perceive him/her. Please answer all items on the questionnaire.

Forty-five descriptive statements are listed below and on subsequent pages. **Judge how frequently each statement fits the person you are describing.** Use the following rating scale:

Not at all	Once in a While	Sometimes	Fairly Often	Frequently, If not always
0	1	2	3	4

- | | | | | | |
|--|---|---|---|---|---|
| 1. Provides me with assistance in exchange for my efforts. | 0 | 1 | 2 | 3 | 4 |
| 2. Re-examines critical assumptions to question whether they are appropriate. | 0 | 1 | 2 | 3 | 4 |
| 3. Fails to interfere until problems become serious. | 0 | 1 | 2 | 3 | 4 |
| 4. Focuses attention on irregularities, mistakes, exceptions, and deviations from standards. | 0 | 1 | 2 | 3 | 4 |
| 5. Avoids getting involved when important issues arise. | 0 | 1 | 2 | 3 | 4 |

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