THE RELATIONSHIP BETWEEN PRINCIPALS’ CONFIDENCE, HUMILITY, AND EFFECTIVENESS: A STUDY OF TEACHER PERCEPTIONS

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ABSTRACT

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Humility in leadership has received growing attention in both the popular press and academic journals in recent years. A number of studies have asserted, based on theoretical or conceptual analyses, that humility plays an important role in effective leadership. However, there is a paucity of empirical research on the relationship between humility and leader effectiveness. Moreover, the literature is virtually devoid of studies of the relationship between humility and confidence, an attribute demonstrated by numerous studies to be linked to successful leadership. The purpose of the present study, then, was to empirically examine the understudied relationships between leader humility, confidence, and effectiveness, as measured by follower perceptions.

In this study, 137 teachers from K-12 educational settings completed a survey designed to measure teachers’ perceptions of their principals’ behaviors. The Confidence scale was comprised of two subscales (Task Confidence and Leader Efficacy); the Humility scale was comprised of three subscales (Teachability, Appreciation, and Self-Awareness); and the Leader Effectiveness scale was comprised of Transformational Leadership and Outcomes of Leadership. Results revealed strong positive correlations between the three primary variables and their subscales. Next, ANOVA findings showed that confidence and humility interacted in their effect on leader effectiveness. For leaders rated as having medium or high levels of confidence, leader effectiveness ratings increased as humility levels increased. Similarly, for leaders rated as having medium or high levels of humility, leader effectiveness ratings increased as confidence
levels increased. However, the same pattern was not found for leaders rated as having low levels of either confidence or humility. Lowest effectiveness ratings were found for leaders rated as having high confidence-low humility. Interestingly, no principals were rated as having low confidence-high humility. Multiple regression analyses revealed that confidence and humility significantly predicted leader effectiveness and both of its subscales when demographic variables were excluded from consideration. When demographic variables were entered into the analyses, however, confidence failed to predict Outcomes of Leadership.

Overall, results provided strong support for the importance of humility as an attribute of effective leadership. The findings have potentially important implications for leadership practice. Current leaders may enhance their effectiveness by examining the extent to which they demonstrate humility. Leadership development programs and leadership selection processes may also be improved by including increased emphasis on the value of humility.
This dissertation is dedicated to the Leader of my life, who was the definitive example of humble servant leadership, and to leaders everywhere who seek to follow that example.

(Philippians 2:3-11)
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CHAPTER 1: INTRODUCTION

“Before his downfall a man’s heart is proud, but humility comes before honor.”

(Proverbs 18:12)

Arrogance has contributed to the downfall of leaders throughout history. One doesn’t have to look far back in history to find examples. Richard Nixon, Rob Blagojevich, Kenneth Lay, Martha Stewart, and former Detroit mayor Kwame Kilpatrick are each examples of leaders in recent decades who have fallen from positions of leadership, and arrogance has been widely reported in the popular press as a characteristic of each one’s demise. Yet arrogance is a potential pitfall for all leaders, not only those who are famous or infamous, including those in educational settings. Among leadership experts, arrogance—and the similar characteristics of hubris, egocentrism, and narcissism—is considered dangerous to leaders.

The dangers of arrogance are many, and have perhaps been best described by Kouzes and Posner (2002), who stated, “All evil leaders have been infected with the disease of hubris, becoming bloated with an exaggerated sense of self and pursuing their own sinister ends” (pp. 396-397). Arrogance has been listed as one of eight dangers that high altitude leaders must fear (Warner & Schmincke, 2008). As examples of this danger, scholars have suggested that arrogance contributes to unethical leader behavior such as deceit (Bok, 1988), manipulation of followers (Hollander, 1998), and misuse of power (Mayeroff, 1995). Such unethical behaviors can undermine the leader’s integrity and credibility and follower trust, which are essential elements of leader effectiveness (Butler, 2001; Daly & Chrispeels, 2008; Kouzes & Posner, 2002; Sankar, 2003). In fact, arrogance has been identified as a characteristic of leaders who have problems building relationships with others based on trust, and such problems are associated with ineffective leaders (Ruderman, Hannum, Leslie, & Steed, 2001).
One of the most notorious examples of recent leader—and organizational—arrogance, ethical violations, and failure in the United States is that of Kenneth Lay, former Chief Executive Officer (CEO) of Enron. The downfall of Enron, under the leadership of Lay and others like him, has been attributed to a culture of arrogance characterized by hubris, an overweening pride, a sense of invincibility, greed, rule breaking, and deception (McLean, 2001). Enron’s culture has also been described as being characterized by fraud, a lack of listening, and an inability to admit mistakes (Watkins, 2006). There may be truth in the adage, “those whom the gods would destroy, they first make proud” (anonymous).

Arrogance is not limited to the world of politics or big business, however. In describing the dark side of school leadership, Blase and Blase (2004) discussed principals’ misuse of power and mistreatment of teachers. Many of the principals’ behaviors they described reflect an attitude of superiority or arrogance by the principal. Similarly, Davis (1998) found that the most frequent reason school principals lose their jobs was failure to build and maintain positive interpersonal relationships, and several of the behaviors characterizing principals who were terminated imply the presence of arrogance.

Arrogance, however, is not to be confused with self-confidence (Hader, 2008; Kanter, 2005; Tiberius & Walker, 1998; Ward, 2007), a characteristic widely believed to be necessary for effective leadership. In fact, McCormick (2001) found that “every major review of the leadership literature lists self-confidence as an essential characteristic for effective leadership” (p. 23). Sashkin (2004) discussed the importance of self-confidence for leaders and asserted that “the first and perhaps most basic characteristic of transformational leaders is self-confidence” (p. 185). Moreover, as Locke (1991) stated, “That self-confidence is a necessary trait for successful leadership is undisputed” (p. 26).
Self-efficacy, a concept closely related to self-confidence, has also been found to be associated with leader effectiveness (McCormick, 2001). Perhaps Henry Ford best summarized the value of self-confidence and self-efficacy when he said, “Whether you think you can, or you think you can’t, you’re right” (Blaydes, 2003, p. 2).

Both scholars and practitioners have distinguished between self-confidence as a desirable characteristic of leaders and arrogance as an undesirable characteristic. Leaders may struggle with walking a fine line between confidence and overconfidence that is perceived as arrogance, as described by this online discussion post:

I’ve read many things about confidence and how to acquire it: body language, eye contact, self assurance, experience, love of yourself, stick to [your] own opinion. However, when I have good body posture and act confident and do everything that would make myself feel and appear confident, it actually makes people less attracted to me and even look down upon me. The reason is… my display of confidence comes off as arrogance to other people. So my question is, what is the crucial difference between confidence and arrogance and how does one become truly confident while completely avoiding arrogance? (pigsonthewing6)

As Kanter (2010) said, “Winners become sinners when confidence turns into complacency and arrogance.” Moreover, arrogance has been described as “blind overconfidence in one’s capabilities” (Khan, 2008). If one accepts the premise that arrogance is an exaggerated sense of self-confidence, one might logically be led to ask this question: What is the difference between confident leaders and arrogant leaders? The answer, according to many authors, is this: humility.
Humility has been described as “the dividing line between confidence and arrogance” (Hader, 2008, p. 6). According to Vera and Rodriguez-Lopez (2004), humility “enables leaders to distinguish the delicate line between such characteristics as healthy self-confidence… and those of over-confidence, [and] narcissism… Humility is the mid-point between the two negative extremes of arrogance and lack of self-esteem” (p. 395). The general consensus among leadership analysts seems to be this: Self-confidence can become arrogance if it is not balanced with humility.

A number of highly respected leadership experts have asserted that humility is essential to leader effectiveness. In his best-selling book entitled Good to Great, Collins (2001) identified humility as an essential characteristic of what he calls Level 5 Leadership—the very highest level of leadership possible according to his model. Senge (2005) has called humility an attribute of real leadership because it is necessary for discovering biases in the leader’s thinking. In their best-selling book entitled The Leadership Challenge, Kouzes and Posner (2002) viewed humility as so important that they asserted, “Perhaps the very best advice we can give all aspiring leaders is to remain humble and unassuming” (p. 398).

**Purpose of and Rationale for the Present Study**

Researchers and practitioners have long sought to better understand how people in leadership positions—from front-line supervisors to union stewards to middle managers to executives—can be more successful and effective as leaders. In recent years a growing number of practitioners and leadership analysts have claimed that humility is necessary for leaders to be successful and/or effective. (Appendix A lists examples.) Similar claims have been made by scholars who have theorized about humility and leadership (Klenke, 2005; Morris, Brotheridge, & Urbanski, 2005; Sandelands, 2008; Vera & Rodriguez-Lopez, 2004; Worthington, 2008). Yet,
despite the call for greater humility in leaders, there is a paucity of scientific research examining the relationship between leader humility and leader effectiveness. Only 11 years ago, Tangney (2000) suggested that “humility is a neglected virtue in the social and psychological sciences. Virtually no empirical research directly has addressed this long-revered construct…. Scientific study of the nature and implications of humility is still in its infancy” (p. 70). This statement also holds true for research on humility in educational leadership.

Although many writers have asserted a connection between leader humility and leader effectiveness based on their experience and/or observations, very few studies have empirically examined this relationship, and no quantitative studies have examined the statistical relationship between these two constructs—perhaps because it is easier to intuitively recognize humility (or lack thereof) than it is to measure it. Extensive review of the current literature reveals that the words of Morris et al. (2005) still hold true:

- It appears that the relationship between humility and leadership has been considered primarily in the popular press rather than in empirical research…. Others have discussed some potential benefits of humility for organizations…
- Most of these proposals, however, stem from anecdotal sources and have not yet been anchored in the scientific literature. (p. 1325)

Moreover, no studies have examined the relationship between leader humility and leader self-confidence, despite the apparent association of both constructs with leader effectiveness, and despite claims that humility is needed to prevent self-confidence from evolving into arrogance. In fact, Nielsen, Marrone, and Slay (2010) suggested that future research be directed toward humility’s interaction with general charismatic leader qualities, including that of self-confidence. Further, no studies have been conducted examining the relationship between all three of these
variables, particularly the combined impact of leader self-confidence and leader humility on leader effectiveness.

The purpose of the present study, therefore, is to help fill a gap in the leadership literature by specifically and empirically examining the relationship between follower perceptions of leader confidence, leader humility, and leader effectiveness, among educational leaders. These understudied relationships will be examined using quantitative methods—more specifically, a correlational research design. This design will reveal the degree to which follower perceptions of leader confidence and of leader humility—separately and in combination—are related to, or predictive of, perceptions of leader effectiveness.

Not only will this study fill a gap in the literature, but it will also seek to contribute something of value to practitioners and policymakers. If both leader humility and leader self-confidence are in fact related to leader effectiveness, then this study should serve to enhance our understanding of the relative importance (or unimportance) of these two characteristics for leaders. For practitioners, the results of this study may be used to provide guidance to current and prospective leaders as they evaluate their own leadership behaviors and seek to be more effective. For organizational policymakers such as the board of directors of schools, non-profits, and other organizations, this study may have implications for the selection of applicants for leadership positions, promotion of employees to such positions, and the use of programs intended to promote the development of effective leadership attributes, skills, and behaviors.

Data Sources and Analysis Methods

To answer the study’s research questions (listed below), this study surveyed teachers in K-12 educational settings taking graduate-level Education courses at a mid-sized Midwest public university. The instrument used for this study, entitled the Perceptions of School Leadership
Survey (to be reviewed in detail in Chapter 3), was designed to assess participants’ perceptions of their leaders’ confidence, humility, and effectiveness. Participants’ responses to the survey items provided quantitative data that was analyzed using correlations, Analyses of Variance and Covariance, and multiple regression analyses.

Research Questions

To examine the understudied relationships between leader confidence, humility, and effectiveness, the following research questions will guide this study. As Chapter 3 will explain in more detail, these three variables will be measured via follower perceptions. Moreover, as the literature review will demonstrate, leader effectiveness is impacted not only by affective characteristics of the leader such as leader self-confidence and humility, but also by the leader’s demographic characteristics, follower characteristics, and contextual factors. Therefore, in order to best understand the relationship between leader confidence, humility, and effectiveness, this study examined the need to control for variables related to leader (principal) demographics (sex, level of education, leadership experience, race/ethnicity), participant (teacher) demographics (sex, level of education, race/ethnicity, job-related experience), and school context-related demographics (school district socioeconomic status, school performance, number of teachers the principal directly supervises, and size of the school as defined by number of students attending the school). The number of years the teacher and principal have worked together was also examined in this context.

1. What is the relationship between leader confidence, humility, and effectiveness? (Do followers perceive that leader humility is compatible with leader confidence? Do they perceive that leaders are both humble and effective?)

2. Do leader confidence, humility, and effectiveness differ by demographic variables?
3. Does leader effectiveness differ by the level of leader confidence and humility, while controlling for relevant demographic variables?
   a. Are there significant mean differences for leader effectiveness by leader confidence level?
   b. Are there significant mean differences for leader effectiveness by leader humility level?
   c. Is there a significant interaction on leader effectiveness between leader confidence and humility?
4. Do leader confidence and humility significantly predict leader effectiveness?
   a. Which subscales of confidence and humility significantly predict leader effectiveness?
5. Which of the study’s variables (i.e., confidence, humility, sex, level of education, leadership experience, and race/ethnicity of the leader; sex, level of education, teaching experience and race/ethnicity of the follower; number of years worked together; ODE designated school district typology and school report card grade; the number of followers the leader supervises, and numbers of students in the school) significantly predict leader effectiveness?

Definitions

Although the three primary variables in this study have been defined in a variety of ways in the literature, the following definitions will guide the present study, with each variable being defined and measured by follower perceptions.

**Leader humility.** Owens (2009) defined humility as a willingness to view oneself accurately, characterized by an appreciation of others’ strengths and contributions, teachability, and a low self-focus. For purposes of this study, leader humility is defined as follower perceptions of the leader’s willingness to view himself or herself accurately and operationally defined as the mean score on the Owens Humility Scale (Owens, 2009).
**Leader confidence.** Because self-confidence is conceptually similar to self-efficacy (McCormick, 2001), the definition of leader confidence used for the present study is based on the concept of leadership self-efficacy. Leadership self-efficacy is the leader’s perception of his or her capabilities to perform functions necessary to accomplish specific leadership roles effectively (Ng, Ang, & Chan, 2008). Because the present study will focus on follower perceptions of the leader, leader confidence is here defined as follower perceptions of the extent to which the leader demonstrates that he or she feels capable to perform functions necessary to accomplish his or her leadership role effectively. For the present study, leader confidence is operationally defined as the mean score on a Confidence instrument developed specifically for this study, as described in Chapter 3.

**Leader effectiveness.** Leadership is “a process of social influence in which one person is able to enlist the aid and support of others in the accomplishment of a common task” (Chemers, 2000, p. 27). Based on this definition of leadership, then, the present study defines leader effectiveness as follower perceptions of the frequency with which the leader engages in behaviors that influence others to engage in activities that result in the achievement of mutual goals. For purposes of this study, leader effectiveness is operationally defined as the mean score of 29 items from the Multifactor Leadership Questionnaire (MLQ) 5x-Short (Avolio & Bass, 1995), including a 20-item Transformational Leadership subscale and a 9-item Outcomes of Leadership subscale.

**ODE designated school district typology.** The Ohio Department of Education (2007) classifies all public school districts in the state of Ohio according to one of the following typologies: (0) island districts or college corner; (1) rural/agricultural–high poverty, low median income; (2) rural/agricultural–small student population, low poverty, low to moderate median
income; (3) rural/small town–moderate to high median income; (4) urban–low median income, high poverty; (5) major urban–very high poverty; (6) urban/suburban–high median income; (7) urban/suburban–very high median income, very low poverty. For purposes of the present study, school district typology served as a proxy measure for the district’s socioeconomic status.

**ODE school report card grade.** The Ohio Department of Education (2008-2009) assigns all public school districts in the State and each school building within the districts one of the following grades, based on several performance indicators: Excellent with Distinction; Excellent; Effective; Continuous Improvement; Academic Watch; and Academic Emergency.

**Organization of the Study**

Chapter 2 introduces a conceptual framework for this study and reviews the literature related to leader effectiveness, leader humility, and leader confidence. The remaining chapters consist of a review of the methods used for this study, including a description of participants, instruments, and statistical analyses used to analyze the data (Chapter 3); an analysis of the results of this study, (Chapter 4); and a discussion of the significance of the results and implications for research and practice (Chapter 5).
CHAPTER 2: LITERATURE REVIEW

“There is no limit to what can be done if it doesn’t matter who gets the credit.”

(Anonymous)

After giving a brief overview of the leader effectiveness literature, this chapter will introduce a conceptual framework for the present study. It will then contrast arrogance and humility, review theoretical analyses asserting a positive relationship between leader humility and leader effectiveness, and highlight empirical studies that have directly or indirectly shown a relationship between leader humility and leader effectiveness. This chapter will also summarize research specifically examining the relationship between leadership self-efficacy (a construct highly similar to confidence) and leader effectiveness. It will end with a brief review of issues related to the measurement of follower perceptions and of research on relevant demographic variables. This review of the literature provides a context and rationale for the present study on the relationship between follower perceptions of leader humility, confidence, and effectiveness.

General Overview of the Leader Effectiveness Literature

Leadership has been described as the art of mobilizing others to want to struggle for shared aspirations (Kouzes & Posner, 2002). As defined in Chapter 1, leader effectiveness refers to the degree to which leaders influence others to engage in activities that result in the achievement of mutual goals. A vast amount of research has been conducted to identify and better understand the factors contributing to leader effectiveness. In general, leader effectiveness has been found to result from an interaction of factors in the several categories. The examples given in each category below are by no means comprehensive; they represent just a sample of findings from the leader effectiveness literature.
• Personal traits or attributes of the leader, including personality (Hogan & Kaiser, 2005; Judge, Bono, Ilies, & Gerhardt, 2002), emotional intelligence (Rosete & Ciarrochi, 2005; Ruderman et al., 2001), motivational pattern such as task vs. relationship orientation (Fiedler, 1972), self-efficacy and self-confidence (to be reviewed below) and humility (to be reviewed below).

• Leadership styles, including charismatic/transformational leadership (Avolio, Walumbwa, & Weber, 2009; Judge & Bono, 2000; Judge & Piccolo, 2004), authentic leadership (Walumbwa, Avolio, Gardner, Wernsing, & Peterson, 2008), servant leadership (Barbuto & Wheeler, 2006), spiritual leadership (Fry & Kriger, 2009), and situational leadership—the ability to match leader behaviors to the needs of followers and the situation (Hersey, Blanchard, & Johnson, 2001).

• Leadership competencies and skills (Hogan & Kaiser, 2005), such as the ability to implement change (Gilley, McMillan, & Gilley, 2009) and listening and empathy skills (Barbuto & Wheeler, 2006).

• Demographic characteristics of the leader, such as prior leadership experience (Avery, Tonidandel, Griffith, & Quinones, 2003), gender (Ayman, Korabik, & Morris, 2009; Douglas & Ammeter, 2004; Prime, Jonsen, Carter & Maznevski, 2008), and education (Judge & Bono, 2000).

• Characteristics of followers, such as follower maturity and ability and willingness to accomplish a specific task (Hersey et al., 2001) and follower motive patterns (Wofford, Whittington, & Goodwin, 2001).
• Characteristics of the context or situation, such as organizational size (Lowe, Kroeck, Sivasubramaniam, 1996), the degree to which the situation gives the leader power and influence (Fiedler, 1972), and dimensions of the cultural setting (Yan & Hunt, 2005). Broadly stated, then, leader effectiveness is influenced by the interaction among leader attributes, leadership skills, leadership style, follower characteristics, and elements of the situation/context. Figure 1 provides a conceptual framework illustrating these variables and their relationships, specifying only the leader, follower, and contextual characteristics for which data will be collected in this study.

*Figure 1. Conceptual Framework.*
This chapter will focus on the leader effectiveness literature that is most relevant to the affective characteristics of leader humility and leader confidence. Before reviewing the literature on humility and leader effectiveness, a review of the relationship between arrogance and leader ineffectiveness is in order.

**Arrogance and Leader Ineffectiveness**

Arrogance has been defined as “an attitude of superiority manifested in an overbearing manner or in presumptuous claims or assumptions” and as “an exaggerated sense of one's importance that shows itself in the making of excessive or unjustified claims” (Merriam-Webster OnLine Dictionary, 2010). It is characterized not only by a sense of superiority (Bok, 1988; Tiberius & Walker, 1998) but also a lack of caring for others (Mayeroff, 1995), an expectation to be liked, admired, respected, attended to, praised, complimented and indulged, a sense of entitlement, and excessive self-esteem (Hogan & Hogan, 2001). Arrogant leaders have a poor capacity for listening and learning (Ready, 2005; Steile & Bommelje, 2006), believe that they are right and everyone else is wrong (Dotlich & Cairo, 2003), overestimate their abilities and invincibility while failing to see their flaws and weaknesses (Kanter, 2004, 2010) and are unwilling to admit their mistakes (Najar, Holland, & Van Landuyt, 2004).

Tiberius and Walker (1998) presented an excellent philosophical discussion of arrogance and why it is a problem, not specific to the realm of leadership. Yet within the realm of leadership, one does not have to look very far to find books or articles in professional magazines, newsletters, or journals whose authors have suggested that arrogance contributes to leader failure or derailment. For example, Dotlich and Cairo (2003) identified arrogance as the first of eleven behavioral patterns that cause Chief Executive Officers to fail. In an article entitled *How to Fail as a Leader*, Khan (2008) included arrogance as one of ten mistakes leaders should avoid.
Ready (2005) asserted that arrogance is a flaw that eventually leads to a leader’s derailment. Similarly, Irwin (2009) described arrogance as the “mother of all derailers” (p. 161) and identified hubris as being the second of five stages of leader derailment. Although Kerfoot (1997) did not use the word arrogant to describe leaders who are at-risk of moving from success to failure, she definitely implied arrogance in asserting that success can lead to failure when leaders lose a sense of humility, become egotistical, and value only their own opinions. (Appendix B lists examples of other articles in the popular press and practitioner publications that assert a connection between leader arrogance and failure or derailment.)

Not only is failure associated with arrogance of the leader; it is also associated with arrogance of people in the organization. In his book entitled, How the Mighty Fall, Collins (2009) identified five stages of decline found in failed companies. The very first stage is “hubris born of success”—a stage in which the company’s people, including its leaders, become arrogant. This stage is evident when a successful company becomes insulated by its success. Its people regard success as an entitlement, or perhaps view it as inevitable given their track record, and they lose sight of the underlying factors that created success in the first place. This stage also occurs when the people in a company overestimate their own merit and capabilities and attribute success to their own supposedly superior qualities. The company’s leaders may presume they’ve reached an understanding of the factors that brought them success, and become complacent in this knowledge.

A connection between arrogance and leader failure or derailment can also be found in the scholarly literature. In reviewing the literature on why leaders fail, Burke (2006) identified arrogance as a common cause of leader failure. Hogan and Hogan (2001) cited arrogance as one of several dysfunctional dispositions of incompetent managers that are associated with
managerial derailment. In a study on leadership derailment, Najar et al. (2004) also described arrogance as a dysfunctional interpersonal tendency. In reviewing studies on managerial derailment, Hogan (1994) identified arrogance as a personality defect or flaw of failed leaders. Shipper and Dillard (2000) also cited evidence of a connection between arrogance and leader derailment, and recommended that arrogant individuals should not be selected for promotion to managerial positions.

Arrogance appears to be negatively related to emotional intelligence, which is viewed as a key determinant of effective leadership within the leadership literature (see, e.g., Boyatzis, 2009; Cherniss, 2001; Emmerling & Goleman, 2005; George, 2000; Kerr, Garvin, Heaton, & Boyle, 2006; Ruderman et al., 2001). A key component of emotional intelligence is self-awareness, which includes accurate self-assessment of one’s abilities (Bar-On, 2007; Carson, Carson, & Birkenmeier, 2000; Goleman, 1998). It follows that leaders with an exaggerated sense of self (arrogance) lack a key element of emotional intelligence (self-awareness) and are therefore prone to ineffectiveness. In fact, Irwin (2009) cited “Failure of Self-/Other-Awareness” as the first stage of leader derailment, and Shipper and Dillard (2000) also attributed leader derailment to lack of self-awareness.

Similarly, arrogance appears to be associated with blind spots in which leaders fail to see their weaknesses. Sala (2003) found that higher level leaders and managers were more likely than lower level employees to have an inflated view of their emotional intelligence competencies and less congruence with the perceptions of others who work with them often and know them well, and suggested that this discrepancy creates executive blind spots. Because, by definition, arrogance includes an exaggerated opinion of one’s own ability, one might logically suspect that arrogance contributes to such blind spots. Tiberius and Walker (1998) captured this idea
perfectly when they said, “The arrogant person is cut off from most other people as a source of information about himself, because he thinks others could not possibly have anything important to contribute to him” (p. 388).

Whereas the aforementioned studies assert a theoretical connection between arrogance and leader failure or derailment, at least three empirical studies have found a statistical relationship between arrogance and leader ineffectiveness. Najar et al. (2004) found that leader arrogance and other dysfunctional behaviors negatively influenced participants’ ratings of leader performance. In an examination of the personality characteristics of captains of commercial airline crews, Chidester, Helmreich, Gregorich, and Geis (1991) found that captains of crews with the most errors were described, among other things, as arrogant, boastful and egotistical. Ruderman et al. (2001) found that arrogant managers scored low on the emotional intelligence ability of impulse control, which was found to be associated with problems with interpersonal relationships—problems that contribute to leader ineffectiveness and derailment. Their findings support a connection between leader arrogance, lack of emotional intelligence, and ineffectiveness.

Similar to arrogance are the constructs of narcissism, hubris, and egotism/egocentricity. A relationship between these constructs and leader failure or ineffectiveness has also been asserted by both practitioners (Hayward, 2007; Kets de Vries, 2008) and scholars (Blair, Hoffman, & Helland, 2008; Brunell et al., 2008; Campbell & Campbell, 2009; Chang & Diddams, 2009; Davar, 2004; Khoo & Burch, 2008; Lawrence, 2008; Popper, 2002). Moreover, hubris, narcissism and egocentrism have also been associated with unethical leader behaviors which contribute to the downfall of leaders (Blair et al, 2008; Kouzes & Posner, 2002; Ludwig & Longenecker, 1993).
In summary, then, arrogance is widely viewed as a leadership attribute to be avoided because of its pitfalls and association with leader derailment and ineffectiveness. In contrast, humility is gaining increased attention as a desirable attribute of leaders. The next section will review the characteristics of humility.

**Humility: The Antithesis of Arrogance**

To be humble is to *not* be haughty or arrogant (Merriam-Webster OnLine Dictionary, 2010). As the opposite of arrogance (Baker, 2008), humility has been treated in the literature as being incompatible with arrogance, and has been advocated as being necessary for leaders to avoid the pitfalls of arrogance (Collins, 2009; Irwin, 2009; Khan, 2008; Warner & Schmincke, 2008). Beazley (as cited in Klenke, 2005) described humility as “modesty in behavior, attitude and spirit, marked by a willingness to learn, to be wrong, and to put other agendas ahead of one’s own” (p. 60). Morris et al. (2005) defined humility as “a personal orientation founded on a willingness to see the self accurately and a propensity to put oneself in perspective” (p. 1331).

In contrast to arrogance, humility is characterized by listening and learning (Hader, 2008; Kerfoot, 1997; Schein, Kahene, & Scharmer, 2001) and by mutuality and care (Mayeroff, 1995; Morris et al., 2005). It involves the realistic appraisal of one’s strengths and weaknesses, talents and accomplishments, successes and failures, and a willingness and ability to see the self accurately, with modesty, and without exaggeration (Exline & Geyer, 2004; Klenke, 2005; Morris et al., 2005; Tangney, 2000; Vera & Rodriguez-Lopez, 2004). Humility is also characterized by the ability to acknowledge mistakes and limitations; by openness to new ideas, contradictory information and advice; and by keeping one’s abilities and accomplishments in perspective (Tangney, 2000). As a personality construct, humility has been linked to honesty, altruism, and integrity (Ashton & Lee, 2007; Lee & Ashton, 2004).
Humility as a personality trait. Researchers such as Lee and Ashton and colleagues have also identified humility, paired with honesty, as a dimension of the human personality. The honesty-humility domain is characterized by sincerity, fairness, greed avoidance, and modesty (Lee & Ashton, 2004). High scores on honesty-humility indicate an unwillingness to manipulate or take advantage of others, avoidance of fraud and corruption, avoidance of lavishness, and a tendency to be unassuming. Low scores, on the other hand, reflect a willingness to manipulate others and to gain by cheating or stealing, a desire to display wealth and privilege, and an attitude of superiority—characteristics consistent with arrogance. Honesty-humility has been shown to predict integrity, low manipulativeness, and low egotism (Ashton & Lee, 2007; Lee, Ashton, Morrison, Cordery, & Dunlop, 2008). It also has been found to correlate negatively with Machiavellianism and narcissism (Lee & Ashton, 2005)—traits which are at least partially characterized by arrogance, and which have been theoretically associated with leader ineffectiveness and unethical leader behavior (Blair et al., 2008; Brown & Trevino, 2006; Morris et al., 2005). Rowatt et al. (2006) similarly examined humility as a personality dimension, which they measured relative to arrogance. Their study supported the idea that dispositional humility is a positive quality with possible benefits, and suggested their study may have implications for leadership.

Humility as a virtue. Philosophers and theologians have written extensively about the virtues of humility and the pitfalls of pride, dating from biblical times to the present. Whereas arrogance is generally viewed as a vice in these literatures, humility is typically viewed as a virtue or character strength (see, e.g., Scheler, 1913/2005; Worthington, 2008.) Yet religious scholars are not the only ones who have viewed humility as a virtue, as secular publications have also espoused the virtue of humility. For example, Baker (2008) advocated that the virtue of
humility should guide the behaviors of those in professional practice. Peterson and Seligman (2004) included humility as one of many character strengths and virtues. In his best-selling book entitled *The 7 Habits of Highly Effective People*, Stephen Covey (1989) identified humility as one of the attributes of the Character Ethic, which he described as the foundation of success. Covey (2006) also described humility as “the mother of all virtues” (p. 5). Humility has also been described as a lost virtue in leadership (Wagner, 1999) and as a “virtue of supreme strength” needed for the proper exercise of power and authority by leaders (Sandelands, 2008, p. 139). Relatedly, humility has also been conceptually linked to integrity and ethical leadership (Brown & Trevino, 2006; Caldwell, Hayes, & Long, 2010; Reave, 2005; Sankar, 2003), while modesty, a closely related construct, has been conceptually linked to moral leadership (Badaracco, 2001). Other authors have advocated humility as being necessary for effective faith-based leadership (Williams, 2000) and spiritual leadership (Blackaby & Blackaby, 2001). Mother Teresa, Gandhi, and Jesus have commonly been identified as great leaders who possessed the virtue of humility.

**Theoretical Analyses of Humility and Leader Effectiveness**

Compared to the religious and philosophical literature, much less attention has been given to humility in the social sciences and organizational management literature—until recently. Tangney (2000) provided an excellent review and theoretical analysis of humility, not specific to leadership, and called for greater attention to the construct of humility in the social and psychological sciences. In fact, there is an emerging body of scholarship on humility, and both scholars and practitioners within the last decade have begun to examine humility in the context of leadership—perhaps due to highly publicized cases of leader arrogance, unethical behaviors, and downfall.
There is no shortage of books, online blogs, and newsletter, magazine, and journal articles written in the past decade in which practitioners and leadership analysts have discussed humility as an antidote to arrogance and/or claimed that humility is necessary for leaders to be successful and/or effective. For example, Crom (1998) suggested that effective leaders are those who maintain their humility by showing respect for employees and acknowledging their contributions to the team. Some of the most well-known authors in the field of organizational studies and leadership who have advocated for the need for humility in leadership include Jim Collins (2001, 2009), Stephen Covey (1989, 2006), Jim Kouzes and Barry Posner (2002), John Maxwell (2007), Edgar Schein (Schein et al., 2001), and Peter Senge (2005). (Appendix A lists examples of other authors who have also asserted humility as an attribute of successful leaders.) Covey (1989) described the relationship between humility and leadership effectiveness like this:

The person who is truly effective has the humility and reverence to recognize his own perceptual limitations and to appreciate the rich resources available through interaction with the hearts and minds of other human beings. That person values the differences because those differences add to his knowledge, to his understanding of reality. When we’re left to our own experiences, we constantly suffer from a shortage of data. (p. 277)

In recent years, there has also been a growing body of academic journal articles in which scholars have theorized about humility as an attribute of successful or effective leadership. Morris et al. (2005), for example, have provided an extensive exploration of the theoretical nexus between humility and leadership, and, based upon a thorough review of the literature, argued convincingly that humility should be included on the list of critical competencies or traits required for successful organizational leadership. According to Morris et al., humble leaders are
likely to display at least some minimal levels of self-awareness, openness, and transcendence. Self-awareness involves the ability to understand one’s strengths and weaknesses. Openness involves a willingness to learn from others. Transcendence involves an acceptance of something greater than the self, out of which “comes an understanding of the small role that one plays in a vast universe, an appreciation of others, and a recognition that others have positive worth” (p. 1331). Furthermore:

Authentically humble leaders understand their strengths, weaknesses, and limitations, and recognize how dependent they are on forces outside of themselves. Such individuals appreciate that they do not have all the answers and, as a result, actively seek out the contributions of others as a means of overcoming their individual limitations. Simply put, they demonstrate acceptance as well as resolve: acceptance of personal strengths and limitations coupled with a willingness to ask and utilize help from others. (p. 1332)

Morris et al. (2005) further asserted that humility is necessary for emotional intelligence—particularly emotional management and emotional awareness—and described how those attributes together contribute to effective leadership behaviors such as understanding the level of one’s impact on employees, treating others with respect, and maintaining effective relationships. The authors also described the theoretical linkages between humility and servant leadership, authentic leadership, and transformational leadership, all of which have been found to relate positively to effective leadership. Moreover, they discussed humility as being necessary for developing supportive relationships with their employees. They further suggested that humility affects the way in which leaders use power, in that humble leaders use power for the betterment of others rather than for self-promotion, and share power with others.
In support of Morris et al. (2005), Lawrence (2008) also asserted that humble leaders are more likely to be effective than those who lack humility. Similar to Morris et al., Lawrence argued that leaders who have humility are more likely to have higher emotional intelligence than those with who lack humility. Lawrence also contended (citing Conger, 1990) that leaders with humility are less likely to display the dark side of leadership associated with leader failure, and essentially attributed failure and ineffectiveness to a lack of humility.

Vera and Rodriguez-Lopez (2004) similarly proposed that humility is a critical strength for leaders and organizations possessing it, and a dangerous weakness for those lacking it. They argued that humility is a source of competitive advantage for strategic leaders and organizations, and they cited numerous examples of successful top-level executives recognized for valuing humility in their businesses, including Sam Walton, founder of Wal-Mart Stores; Mary Kay Ash, founder of Mary Kay Inc.; Herb Kelleher, president of Southwest Airlines Co.; Darwin Smith, former chief executive officer (CEO) of Kimberly-Clark Corporation; C. William Pollard, former president and CEO of ServiceMaster Industries Inc.; and Ingvar Kamprad, founder of the IKEA Group.

More recently, Nielson et al. (2010) proposed that humility “is an important but overlooked antecedent to effective socialized charismatic leadership” (p. 33). According to their analysis of humility’s role in this style of leadership, humility contributes to vision generation, vision implementation, and communication, which in turn contribute to leadership effectiveness via follower outcomes such as follower identification with the leader, trust in the leader, self-efficacy, motivation, and willingness to sacrifice. They asserted that follower attributions of leader humility play an important role in these outcomes. They also concluded that, as a key component of socialized charismatic leadership, humility is “a desirable characteristic that
prevents excessive self-focus and allows leaders to understand themselves and develop perspective in their relationships with followers” (p. 41).

In an analysis of authentic leadership, Chang and Diddams (2009) postulated that truly authentic leaders are more likely to be effective than non-authentic leaders, and they equated leader authenticity with the virtue of humility. Friedman and Langbert (2000) cited humility as a key element of transformational leadership as exemplified by the biblical story of Abraham, and suggested that Abraham’s example presents important lessons for current-day leadership success and effectiveness. In an analysis of the relationship between corporate values and leader behaviors, Klenke (2005) proposed that spiritual values are a predictor of leader behavior, and identified humility as one of four spiritual values that are requisite for effective leadership. Worthington (2008) suggested that ineffective leaders lack humility, and said that humility needs to be extended to all forms of leadership.

In addition to Morris et al. (2005), other scholars have also suggested a connection between leader effectiveness and humility as a component of servant leadership, which reputable authors such as Blanchard and Miller (2007) and Robert Greenleaf (1970) have asserted to be a mark of great leaders. Patterson (2003) and Waddell (2006) provided excellent discussions of the role of humility in servant leadership. In a thorough conceptual analysis of servant leadership, Page and Wong (2000) identified humility as a component of servant leadership and suggested a definite connection between servant leadership and leader effectiveness. Dennis and Bocarnea (2005) also identified humility as a component of servant leadership and suggested that the instrument they designed to measure servant leadership may be used to measure leader effectiveness. Additionally, Sandelands (2008) discussed humility as a virtue that is the key to the exercise of proper authority by servant leaders. Both Cerit (2009) and Crippen (2004)
implied a link between servant leadership and humility—or at least characteristics that would appear to require humility, such as listening, self-awareness, and commitment to the growth of others—and effectiveness of educational leaders.

Still other scholars, including Reave (2005), Fry and colleagues (Fry, 2003; Fry & Kriger, 2009; Fry & Slocum, 2008), and Zohar (2005) have posited a theoretical connection between humility, spiritual leadership, and leader effectiveness. At least one study (Fry, Hannah, Noel, & Walumbwa, in press) has found empirical evidence to support this connection.

Other studies that do not directly assert a connection between humility and leader effectiveness can nevertheless be interpreted as implying at least an indirect connection. For example, in a study of emotional intelligence of transformational leaders, Barbuto and Burbach (2006) found that as leaders became more self-aware, they perceived themselves as being less inspirational—a finding they suggested reveals the humility of self-aware leaders. Because self-awareness is a component of emotional intelligence, which has been linked to leader effectiveness (Goleman, 1998; Harrison & Clough, 2006; Rosete & Ciarrochi, 2005; Ruderman et al., 2001), this finding implies an indirect connection between leader humility and effectiveness. Additionally, Yanow (2009) advocated reflective inquiry as an important practice for managers, executives, and public policy administrators, and proposed that “passionate humility” is a requisite criterion for the cultivation of reflective practice. The unspoken implication is that such reflective practice results in better, or more effective, leadership.

**Empirical Studies of Humility and Leader Effectiveness**

Although the aforementioned theoretical studies reflect a growing consensus regarding the importance of humility as an attribute of effective leadership, a review of the literature reveals a dearth of empirical studies examining the relationship between humility and leader
effectiveness. Empirical studies that have found, or implied, a relationship between these two constructs are reviewed below. Of these, the first study (by Collins, 2001) provides the clearest and most direct evidence supporting the link between leader humility—as an element of Level 5 Leadership—and leader effectiveness. One quantitative study (Taylor, Martin, Hutchinson & Jinks, 2007) implies a link between leader effectiveness and humility as a component of servant leadership. Several studies finding a relationship between leader effectiveness and congruency between leader self-ratings and follower ratings of the leader also imply a link between leader effectiveness and humility (Atwater & Yammarino, 1992; Bass & Yammarino, 1991; Van Velsor, Taylor, & Leslie, 1993). Four qualitative studies have found humility to be an attribute of the leadership displayed by leaders identified as being effective (Alston, 2005; Harrison & Clough, 2006; Smith, Plowman, Duchon, & Quinn, 2009; Theoharis, 2008). Two of these, however, also found evidence suggesting that leaders can be both humble and arrogant (Harrison & Clough, 2006; Theoharis, 2008).

**Humility and level 5 leadership.** Collins (2001) and his colleagues conducted an extensive mixed methods study on companies that had shifted from “good-to-great” performance. The purpose of the study was to examine if a good company can become a great company and, if so, how. The sample for the study included 11 companies that sustained a shift from “good-to-great,” 11 direct comparison companies that were functioning less successfully, and six comparison companies that had not sustained a “good-to-great” shift. A wide range of quantitative and qualitative analyses were conducted to identify the variables that distinguished the “good-to-great” companies from the comparison companies. Although Collins did not provide detailed information regarding his methods of analysis, based on the information provided it appears that the characteristics of Level 5 leaders were derived from analyses of
qualitative, rather than quantitative, data. As a result of these analyses, the researchers identified seven key variables driving good-to-great transformations. One of these key variables was Level 5 Leadership, which is characterized by a “paradoxical blend of personal humility and professional will” (p. 20). Level 5 leaders are described as having both a compelling modesty and an unwavering resolve. They shun public adulation, are never boastful, lack egocentrism, accept responsibility rather than blame others, and channel their ambition into the company rather than themselves. Level 5 leadership was found to be one of the strongest, most consistent contrasts between the good-to-great and comparison companies. Of all the studies found in the literature, this one presents the strongest empirical link between leader effectiveness and leader humility.

**Humility and servant leadership.** Taylor et al. (2007) examined the relationship between leader effectiveness and servant leadership among school principals. The instrument used to measure servant leadership was comprised of twelve categories, one of which was humility. Based on scores of servant leadership, half of the principals were designated as “servant leaders” and half as “nonservant leaders.” Principals who were designated as servant leaders were perceived by their teachers as more effective leaders than principals who were designated as nonservant leaders, on five dimensions of leader effectiveness. Moreover, servant leaders also scored higher on measures of effective leadership compared to normative data. Although this study did not examine the relationship between humility and leader effectiveness, it does shed light on that relationship by finding a positive relationship between servant leadership—of which humility was a component—and leader effectiveness.

In a qualitative study, Alston (2005) described Black female public school superintendents who persevered in the face of overwhelming obstacles as “archetypal servant
leaders” (p. 681) who were characterized by humility and other qualities. The study further found that these women were “successful in their efforts and [knew] how to be effective educational leaders” (p. 682).

**Humility and congruency between self- and other-ratings.** One way to test humility is to compare self ratings with ratings by others (Reave, 2005). Several studies suggest that leaders whose self-ratings are congruent with follower ratings of their performance—which may be inferred as a reflection of leader humility—are perceived as being more effective than those who over-rate themselves. Van Velsor et al. (1993) found that managers who tended to overrate themselves compared to others’ ratings (which implies a lack of humility) were perceived as lower on self-awareness and effectiveness in comparison to those who accurately rated themselves. Similarly, Atwater and Yammarino (1992) and Bass and Yammarino (1991) found that discrepancies between leader self-ratings and follower ratings of the leader’s performance were related to poorer leader performance in comparison to those with congruent leader-follower ratings. It should also be noted, however, that Van Velsor et al. and Atwater, Roush and Fischthal (1993, cited in Fleenor, McCauley & Brutus, 1996) found that leaders who underrated themselves in comparison to follower ratings were perceived as being even more effective than accurate self-raters. Although leaders who underrate themselves may not meet the definition of humility used in the present study, they may have nevertheless be perceived as being modest or humble by their followers (Atwater & Yammarino, 1992).

**Humility and high-reputation plant managers.** In a qualitative study, Smith et al. (2009) examined what eleven high-reputation plant managers did on a day-to-day basis that accounted for their success in achieving organizational outcomes. Participants were selected using purposive and snowball sampling, based on awards their plant had received and on
informed peer judgments. They found that effective plant managers possessed a configuration of dispositional traits that included humility (as well as self-motivation and affability) and also systematically employed interpersonal behaviors and focused on managerial processes. Participants’ statements that exemplified humility included, “I don’t ever want them to think that… I have all the answers and what I say goes…. I would be foolish and arrogant to think to think that I have all the answers it takes to run a plant this size” and “Am I perfect, by all means no. I can give you all kinds of flaws. I hate to brag.”

Two additional qualitative studies (Harrison & Clough, 2006 and Theoharis, 2008) have also identified humility as a characteristic of effective leaders. However, these studies also suggest that leaders may possess both humility and arrogance, offering a conflicting view with other research. These studies will be reviewed in the next section.

**Conflicting Views on Humility and Leader Effectiveness**

A handful of writers have offered different perspectives on humility, arrogance, and leader effectiveness. Although humility is generally perceived as a desirable trait, not only by various religious traditions but also in the recent leadership literature, it may be viewed less positively in some contexts. Exline and Geyer (2004), for example, found that humility is perceived as a strength or weakness, depending on one’s social role. They found that humility was viewed most favorably as a quality of religious seekers and least favorably as a quality of leaders or entertainers. These results might lead one to question if humble leaders are likely to be perceived by their followers as being effective. Similarly, in a commentary, Lencioni (1999) described humility as an attribute that can contribute to employees’ lack of confidence in a CEO’s ability to lead the organization.
Further, Kelly (2009) warned in a newspaper editorial that humility may serve as a disadvantage to political leaders because when powerful people display humility—the honesty to admit that things aren’t what they should be—and try to seek a solution, it works against them. He opined that hubris is necessary for political success. Such a view is consistent with that of the classic writing of Niccolo Machiavelli (1513/1995), who wrote a guidebook on how political leaders can effectively obtain and maintain power and use that power for personal gain. Machiavelli would agree with Kelly that political leaders cannot be both genuinely humble and effective, as can be seen in the following advice that reflects an obvious assumption of superiority on the part of the leader:

  But it is essential to know how to conceal how crafty one is, to know how to be a clever counterfeit and hypocrite. You will find people are so simple-minded and so preoccupied with their immediate concerns, that if you set out to deceive them, you will always find plenty of them who will let themselves be deceived. (p. 54)

Even authors who have written favorably about humility, however, have acknowledged its potential limitations. Consistent with the Machiavellian viewpoint, the cost of honesty-humility as a personality dimension is the loss of potential gains that would result from exploitation of others (Ashton & Lee, 2007). Morris et al. (2005) have suggested there may be occasions when humility would not benefit leaders or organizations. They postulated, for example, that because humble leaders give honest and accurate appraisals of their strengths and weaknesses, they may receive less compensation and fewer promotions. Morris et al. also suggested that there may be times when situations call for leaders to overplay their strengths and talents in order to inspire followers to rise to overwhelming challenge, and that there may be situations that require
leaders to put themselves at the center of attention in order to inspire a shared vision—something which humble leaders may be unable or unwilling to do. Similarly, Nielsen et al. (2010) suggested that attributions of humility may have a negative impact on certain types of leadership such as transactional leadership (and its use of coercion) or in personalized charismatic leadership. They further state that humility may not be seen as a positive leadership quality by some followers because humility may not fit or match those followers’ implicit leadership theories or prototypes of what a leader should be.

Four studies—two theoretical essays and two using qualitative methods—have offered arguments and evidence that conflict with the vast amount of literature asserting that arrogance is associated with leader ineffectiveness, and that arrogance and humility are incompatible with each other.

In a theoretical essay, Maccoby (2000) argued that “productive narcissism” is a determinant of highly successful leadership and asserted that extraordinary leaders have healthy and positive levels of narcissism that inspire people and shape the future. Similarly, in a theoretical review of narcissistic leadership, Rosenthal and Pittinsky (2006) asserted that narcissists possess the charisma and grand vision that are vital to effective leadership. Because narcissistic leaders are characterized by arrogance (Brunell et al., 2008; Hogan & Hogan, 2001; Kets de Vries & Miller, 1985; Rosenthal & Pittinsky, 2006), these views appear to conflict with the majority of studies on arrogance in leadership.

A qualitative study by Harrison and Clough (2006) not only found evidence to support Maccoby’s (2000) perspective, but also found evidence that effective leaders can be both humble and narcissistic. Harrison and Clough examined “state of the art” leaders to determine which of three sets of leadership attributes tend to be the most prevalent: those reflective of emotional
intelligence, Level 5 capabilities, or productive narcissism. The sample was comprised of 15 executives whom the authors identified through purposive sampling as meeting their criteria for “state of the art” (effective) leaders. Each of the 15 leaders were analyzed regarding the presence or absence of 12 specific traits reflecting either emotional intelligence (5 traits), Level 5 qualities (2 traits, including personal humility), or productive narcissism (5 traits, including egotistical behavior). Data were obtained from secondary sources, including interviews conducted with these 15 leaders in another study, written profiles, and articles in periodicals. Results were obtained via qualitative analyses of these secondary sources. With regard to Level 5 Leadership, 11 of 13 leaders for whom data were available demonstrated personal humility. However, ten of the leaders demonstrated egotistical behavior, with five showing evidence of both humility and egotistical behavior. In general, results showed that the leaders in this study were found to possess characteristics of all three attributes of leadership (emotional intelligence, Level 5 capabilities, and productive narcissism). The authors suggested that effective leaders are able to apply and combine appropriate behaviors across all three attributes.

In an ethnographic study, Theoharis (2008) investigated the identity, common dispositions, and leadership traits of seven school principals who were identified as being committed to social justice. Three common leadership traits were found: arrogant humility, passionate visionary leadership, and a tenacious commitment to social justice. Although the word “effective” was not used to describe the seven school principals who were analyzed, the criteria used to select them for this study implied that they were selected at least in part based on their effectiveness in leading for social justice. The trait of “arrogant humility,” operationally defined as a paradoxical blend of arrogance and humility, was found to describe all of these
leaders, indicating that both humility and a type of arrogance may be necessary for effective social justice school leadership.

Because these studies seem to contradict the growing consensus in the literature concerning humility, arrogance, and leader effectiveness, some cautions regarding interpretation and generalization are in order. First, and perhaps most importantly, both Maccoby (2000) and Rosenthal and Pittinsky (2006) acknowledged or implied arrogance as a weaknesses of narcissistic leaders. Rosenthal identified arrogance as the primary trait associated with the downside of narcissistic leaders. Although Maccoby did not identify arrogance per se as a weakness of narcissistic leaders, he did describe their weaknesses in terms that reflect arrogance, such as being poor listeners and unwilling to learn from others.

Second, Maccoby’s (2000) study was a theoretical analysis based on anecdotal evidence. Although a similar criticism can be made of much of the practitioner literature asserting humility as an attribute of effective leaders, such assertions are supported by empirical studies in the scholarly literature. Thus, Maccoby’s claims need to be empirically tested. Harrison and Clough (2006) did examine and apparently supported Maccoby’s claims. However, the rigor of methods used in their study—use of secondary data sources and interpretation of qualitative data with no clear description of coding methods or report of inter-rater reliability—appears to be questionable.

Third, although narcissistic leaders are characterized by arrogance, narcissism is not limited to arrogance. Therefore, caution should be exercised in extending to arrogance any potential strengths or benefits of narcissism.
Fourth, because the findings of Harrison and Clough (2006) and Theoharis (2008) were based on the use of purposive sampling methods, the findings cannot necessarily be generalized to all leaders (Fraenkel & Wallen, 2008).

Fifth, with regard to the study by Theoharis (2008), it appears likely that the author’s interpretation of arrogance is conceptually similar to high levels of self-confidence/efficacy (to be discussed below). In fact, the author admitted that many scholars who reviewed the findings of his study felt that arrogance appeared to be more accurately described as intense confidence. However, because the study’s participants preferred the term arrogant humility over confident humility, the author chose to defer to their preference in his use of terms. This naturally leads one to question the difference between confidence and arrogance, a question addressed in the next section.

**Confidence, Arrogance, and Humility**

Put simply, “Confidence is the expectation of success” (Kanter, 2005, p. 22). Self-confidence has been argued to be an essential attribute of effective leaders (Chemers, 2002; Locke, 1991; McCormick, 2001; Sashkin, 2004). In fact, Chemers (2002) asserted that “outstanding levels of leadership are not possible without high levels of confidence” (p. 156). Empirical studies have demonstrated a relationship between self-confidence and leader effectiveness (De Cremer & van Knippenberg, 2004) and that self-confidence is a significant psychological difference between leaders and nonleaders (Popper, Amit, Gal, Mishkal-Sinai, & Lisak, 2004). Self-confidence is also a component of Goleman’s (1998) and Bar-On’s (2007) models of emotional intelligence, as an element of self-awareness, which, as discussed above, is associated with leader effectiveness.
In a philosophical analysis of arrogance, Tiberius and Walker (1998) distinguished between self-confidence and arrogance, describing the difference primarily in relation to the arrogant person’s sense of superiority, which is not found in self-confidence. Yet there appears to be a fine line between confidence and arrogance. As Kanter (2004) said:

Confidence is a sweet spot between arrogance and despair. Arrogance involves the failure to see any flaws or weaknesses, despair the failure to acknowledge any strengths. Overconfidence leads people to overshoot, to overbuild, to become irrationally exuberant or delusionally optimistic, and to assume they are invulnerable. (p. 8)

Despite the apparently fine line between confidence and arrogance, confidence—unlike arrogance—does not appear to be incompatible with humility. In an essay on leadership and accountability, Weinrach (2006) asserted that humility “requires a large dose of security and confidence in oneself” (p. 79). In a theoretical analysis of humility and socialized charismatic leadership, Nielsen et al. (2010) referred to “the bridled confidence that characterizes humility” (p. 41) and implied that it is desirable for followers to perceive leaders both as having humility and being confident. In a qualitative study, King et al. (2007) found that as pediatric rehabilitation therapists gained increasing levels of expertise, they demonstrated both heightened humility and increased self-confidence. In a qualitative analysis of company presidents, Janney (1952) asserted that leaders who build the most enduring organizations paradoxically possess both great humility and great self-confidence. Additionally, Theoharis’s (2008) findings (reviewed above) lend support to the idea that leaders can be both humble and self-confident. Similarly, in a qualitative study, Alston (2005) found that black female superintendents were
characterized by both humility and a strong sense of efficacy, which is conceptually similar to confidence.

**Self-Confidence and Self-Efficacy**

Similar to self-confidence, self-efficacy is the expectation that one can perform a behavior successfully to produce a desired outcome (Bandura, 1977). Efficacy beliefs influence one’s expectations of success, and these expectations influence the initiation of an individual’s coping behavior, how much task-related effort will be expended, and how long that effort will be sustained in the face of obstacles. Further, individuals who perceive themselves as efficacious are likely to engage in sufficient levels of effort that, if well executed, produce successful outcomes, whereas those with low self-efficacy perceptions are likely to prematurely discontinue their efforts and fail on the task (Bandura & Wood, 1989). According to Hoyt and Blascovich (2007), individuals with high levels of self-efficacy adopt more problem-focused coping strategies, whereas those with low levels of self-efficacy adopt more emotion-focused coping strategies.

Since Albert Bandura first introduced the concept of self-efficacy in 1977, self-efficacy has been widely studied and applied to numerous academic and professional fields and contexts, including education and organizational management. While some scholars view self-efficacy as a general disposition (Chen, Gully & Eden, 2001; Scherbaum, Cohen-Charash, & Kern, 2006; Sherer et al., 1982), others view it as domain-specific, based on studies showing that a high level of self-efficacy in one domain does not necessarily correlate with high levels of self-efficacy in other domains (Chesney, Neilands, Chambers, Taylor & Folkman, 2006). According to this view, in order to understand self-efficacy in the domain of leadership, one must examine the construct of *leadership* self-efficacy. Leadership self-efficacy, refers to one’s confidence in his
or her capacity or ability to successfully lead a group (McCormick, 2001; Murphy, 2002). Because it is a relatively new construct in the leadership studies arena (McCormick, Tanguma, & Lopez-Forment, 2002), formal inquiry about leadership self-efficacy is in a relatively infant stage (Leithwood & Jantzi, 2008).

Leadership self-efficacy and leader self-confidence are often treated as interchangeable terms in the literature (see, e.g., Chemers, 2002; Kouzes & Posner, 2002; Popper et al., 2004; Sashkin, 2004). According to McCormick (2001), self-confidence and self-efficacy are not identical concepts but are closely associated. Based on his analysis of the literature, he asserted that self-confidence is a trait that “impacts leadership performance through the mediating mechanism of leadership self-efficacy…” (p. 24). He further suggested that because the construct of self-confidence is not embedded in a validated theoretical system, researchers have used Bandura’s construct of self-efficacy to explain how self-confidence influences performance. Accordingly, a review of the literature on leadership self-efficacy/confidence and leader effectiveness is in order.

**Leadership Self-Efficacy/Confidence and Leader Effectiveness: Theoretical Analyses**

Leadership self-efficacy is not the same as leader effectiveness. Whereas leadership self-efficacy refers to a person’s confidence in his or her leadership abilities, leader effectiveness refers to the outcomes or results of one’s leadership behaviors. Numerous studies suggest a strong positive relationship between leadership self-efficacy and leader effectiveness, both theoretically and empirically, as demonstrated by the following review.

McCormick (2001) provided a sound theoretical basis for the relationship between leadership (self-)efficacy and leader effectiveness. Based on Bandura’s social cognitive theory, McCormick presented a model for leadership which included leadership efficacy as the key
cognitive variable regulating leader functioning in a dynamic environment. According to this model, leadership efficacy is critical to leader effectiveness “because it affects the goals a leader selects, leader motivation, development of functional leadership strategies, and the skillful execution of those strategies” (p. 30). More specifically, the model “posits that high self-efficacy will lead individuals [leaders] to set challenging goals, persist in the face of obstacles, work harder on tasks, direct cognitive and behavioral resources toward goal relevant actions, and actively search for effective task strategies” (p. 26). McCormick’s model is highly similar to a model proposed by Kane, Zaccaro, Tremble, and Masuda (2002). An integration of these two models is provided in Figure 2. McCormick also established a relationship between leadership efficacy and leader effectiveness based on the conceptual similarities between leadership efficacy and leader self-confidence, and numerous studies showing self-confidence to be an essential characteristic of effective leadership.

Figure 2. Social Cognitive Model of Self-Regulated Behavior in Leadership (Kane et al., 2002; McCormick, 2001).
In addition to McCormick’s (2001) analysis of how leadership self-efficacy contributes to leader effectiveness, Chemers (2002) and Murphy (2002) also conducted extensive analyses of leadership self-efficacy/confidence and effectiveness. Both Chemers and Murphy provided persuasive arguments and evidence demonstrating a strong relationship between leadership self-efficacy/confidence and leader effectiveness. Chemers discussed how general, social, and emotional intelligence contribute to leadership self-efficacy/confidence, resulting in effective leadership. Murphy discussed how self-efficacy (and multiple intelligences) contributes to leader self-regulation, resulting in effective leadership. Chemers concluded his analysis by stating that confidence plays a key role in outstanding levels of leadership, because “[H]ighly confident leaders are able to project an image of competence, have lower levels of personal anxiety and defensiveness allowing for more effective interpersonal communication and judgment, and possess a calmer demeanor, which facilities complex and effective decision making” (p. 152).

At least four authors have found a connection between leadership self-efficacy/confidence and leader effectiveness in their reviews of the literature. In a meta-analysis of the literature on the trait perspective in leadership research, Judge et al. (2002) found that self-confidence was identified as a trait of effective or emergent leaders in no less than eight of ten qualitative reviews—and in fact, self-confidence was the only trait that was found related to leadership in the majority of those reviews. Chemers (2002) found that “empirical evidence from three major studies support[s] the value of leadership efficacy as a predictor of leadership, group, and organizational performance...” (p. 156). Hoyt (2005) cited several studies to support her assertion that “substantial research has highlighted the effectiveness of leadership efficacy in predicting leadership, group, and organizational outcomes” (p. 2). And in an analysis of the
literature on influence and persuasion, Hoy and Smith (2007) cited the principle of self-efficacy, “Individuals who are confident in their own ability usually succeed” (p. 163) as one of ten basic principles of influence, which they identified as key to successful leadership.

**Leadership Self-Efficacy/Confidence and Leader Effectiveness: Empirical Studies**

The following eight studies have empirically examined the relationship between leadership self-efficacy and leader effectiveness, all of which found a positive relationship between the two constructs, either directly or indirectly. Only the first study examined leaders and leadership self-efficacy in an educational setting.

Leithwood and Jantzi (2008) examined the relationship between leadership self-efficacy and leader effectiveness, along with several other variables, in a study of the nature, causes and consequences of school leader efficacy. With regard to consequences, they examined the degree to which school leader efficacy impacted conditions in the school and student learning outcomes. The sample consisted of school principals and teachers from 96 schools. School leader efficacy was operationally defined both in terms of leaders’ beliefs about their own abilities to improve instruction and student learning (leadership self-efficacy, LSE) and beliefs about the ability of one’s colleagues collectively (leader collective efficacy, LCE) to improve student learning. Principals answered survey questions regarding LSE, LCE, district conditions, and district leadership. Teachers answered survey questions regarding school leader behaviors, class conditions, and school conditions. Results showed that LSE had substantially higher correlations with measures of successful leader behavior did LCE. Also, LSE was found to explain more of the variance in leader behavior, school conditions, and classroom conditions than LCE. However, LSE was not significantly related to any measure of student achievement, whereas LCE was significantly related to two measures of student achievement, and a combined measure
of LSE and LCE was related to all three measures of student achievement. Although the authors discussed the results primarily in terms of the importance of the collective efficacy beliefs of leaders, these results do lend further support to the connection between leadership self-efficacy and leader effectiveness.

In a study of 64 junior-level ROTC cadets, Chemers, Watson, and May (2000) examined the relationship between participants’ self-perceptions of their leadership efficacy and optimism and others’ ratings of their leadership performance. Prior to beginning a six-week advanced leadership camp, participants were rated on their Military Leadership Potential by their military science instructors and completed self-report measures on self-esteem, leadership efficacy (self-perception of leadership skills), and optimism. During the camp, participants were rated by both peers and officers on over-all leadership performance, and on their leadership performance during two specific missions assigned to their squads. Leadership efficacy was strongly and pervasively related to leadership performance ratings by instructors, peers, and trained observers. In summary, leaders who were high in confidence (leadership efficacy) were rated significantly higher than their less confident peers on all measures of leadership performance.

Ng et al. (2008) also studied the relationship between leadership self-efficacy (LSE) and leader effectiveness. Their study examined leadership LSE as a mediator of the link between personality and leader effectiveness, and also the effects of job demands and job autonomy in moderating LSE. The sample was comprised of 394 military recruits from the Singapore Military of Defense. During the first two weeks of enlistment in military service, participants completed a self-report instrument designed to measure their personality on the Big Five personality traits of openness, conscientiousness, extroversion, agreeableness, and neuroticism. Two years later, when participants were nearing the end of their military service period, they
completed self-report measures of LSE, job demands, and job autonomy. Also at that time, a survey designed to assess participants’ leader effectiveness was administered to participants’ direct supervisors. Results showed that LSE mediated the relationships between neuroticism, extraversion, and conscientiousness and leader effectiveness. In addition, the mediating role of LSE on those three personality variables was influenced by the level of participants’ job demands and the level of their job autonomy. The authors concluded that results underscored the importance of situational contexts when examining the relationship between personality, LSE, and leader effectiveness.

Hendricks and Payne (2007) studied the relationship between leadership self-efficacy (LSE), leader goal orientation (LGO), and motivation to lead as antecedents of leader effectiveness, while controlling for personality traits, among 400 undergraduates. Leader effectiveness was measured via team members’ ratings of the leader’s performance on a team task and via an objective measure of team performance on an experimental task. LSE was measured via a self-report instrument completed by participant leaders. Among other relationships, the study found that LSE was significantly related to team member ratings of leader effectiveness; however, LSE did not significantly relate to the objective measure of team performance.

Another study examining the relationship between leadership self-efficacy and leader effectiveness was conducted by Anderson, Krajewski, Goffin and Jackson (2008). The purpose of their study was to develop a taxonomic structure of LSE and examine its relationship with leader effectiveness. The study involved two samples, with the first being comprised of 44 middle- to executive-level managers from an international financial services company who were selected based on several criteria, including leader effectiveness, and the second being comprised
of 251 managers representing a diversity of business units from that same company. The study was conducted in three phases. In phase one, qualitative data from semi-structured interviews with participants in the first sample were used to develop an instrument to measure LSE and an instrument to measure leader effectiveness. In phase two, participants completed the LSE self-rating instrument, and they were rated on their leader effectiveness by supervisors, peers, and subordinates who were familiar with their work. A principal components analysis of these ratings yielded 18 dimensions of LSE and 9 dimensions of leader effectiveness. In phase three, the relationship between the various dimensions of LSE and leader effectiveness were examined using modified canonical correlation analyses, which yielded eight significant relations between the taxonomic structures of LSE and leader effectiveness. In other words, certain dimensions or combinations of dimensions of the LSE were significantly correlated with certain dimensions of leader effectiveness. The results underscored the potential value of specific self-efficacy beliefs for predicting specific aspects of leader performance as well as for understanding and developing effective leadership.

Hoyt, Murphy, Halverson and Watson (2003) conducted two laboratory studies on the relationship between self-efficacy for leadership, self-efficacy for the leadership task, perceptions of collective efficacy by leaders and followers, and anxiety as predictors of leader effectiveness among college students. Efficacy measures were completed via self-report instruments; leader effectiveness was assessed via two objective measures of team performance. Although neither self-efficacy for leadership nor self-efficacy for the leadership task directly predicted leader effectiveness (as measured by team performance), the study found that self-efficacy for leadership was significantly related to leaders’ perceptions of collective efficacy, which were significantly related to followers’ perceptions of collective efficacy, which were
significantly related to team performance. Based on these findings, the authors conducted structural equation modeling to propose a model of leadership effectiveness in which self-efficacy for leadership is indirectly contributed to leader effectiveness, through other efficacy measures.

In a study somewhat similar to that of Hoyt et al. (2003), Taggar and Seijts (2003) studied the relationships between leader role-efficacy, staff-role efficacy, collective efficacy, leader behavior, staff behavior, and team performance among 268 undergraduate business students. Team performance (implied to be a measure of leader effectiveness) was assessed via the extent to which the team’s output met two objective criteria; leader behavior and staff behavior was assessed using peer ratings; role efficacy was measured via self-report instruments. Although leader role-efficacy did not directly predict team performance, it did significantly predict leader behaviors, which significantly predicted collective efficacy, which significantly predicted team performance. The authors used structural equation modeling to propose a model of team performance (an indicator of leader effectiveness) in which leader role-efficacy indirectly contributes to team performance, through leader behaviors and collective efficacy.

A final study finding a relationship between leader efficacy and leader effectiveness was a qualitative study conducted by Alston (2005). In an examination of the literature related to the characteristics of black female school superintendents, Alston described these leaders as being “tempered radicals” and servant leaders. She found them to be successful, effective educational leaders and that, among other attributes, they possessed a strong sense of efficacy.

In somewhat of a contrast to the eight studies finding a positive relationship between leadership self-efficacy and leader effectiveness, one study found only partial support for this relationship. Kane et al. (2002) examined the antecedents and outcomes of leader goals and
leadership self-efficacy (LSE), to test the model depicted in Figure 2 (above). In their study, 96 college students led three-person teams on either a more simple or a more complex production task. Two measures of leadership self-efficacy were obtained. In the first measure, designated as Leadership Self-Efficacy (LSE), team leaders reported their confidence levels for leading a group on a specific activity. In the second measure, designated as General Leadership Self-Efficacy, they reported their confidence levels for performing a variety of leadership functions across group settings. Team leader goals and strategies were also measured. The authors hypothesized that LSE, leader goals, and leader strategies would predict Functional Leadership Behaviors (FLBs), a measure of actions taken by leaders that predicted group effectiveness outcomes. Results revealed that LSE predicted only one of six FLBs, and its ability to predict that one FLB was relatively weak. However, LSE was significantly and positively correlated with two of five measures of group performance outcomes. Taken together, these findings indicated that the hypothesized indirect effects of LSE on FLBs (as an indirect measure of group performance outcomes) were not consistently supported.

Notwithstanding the findings of Kane et al. (2002), as demonstrated by the studies reviewed above, a consistent (direct or indirect) relationship has been found between leadership self-efficacy and leader effectiveness. A leader’s general self-efficacy, however, may be a less powerful predictor of leader effectiveness. Although general self-efficacy has been found to correlate positively with transformational leadership (Munir & Nielsen, 2009; Nielsen, Yarker, Randall, & Munir, 2009; Pillai & Williams, 2004), and transformational leadership has been associated with leader effectiveness in numerous studies (e.g., Avolio et al., 2009; Judge & Bono 2000; Judge & Piccolo, 2004), a consistent relationship between general self-efficacy and leader effectiveness is not found in the literature. For example, Douglas and Ammeter (2004) examined
the general self-efficacy of leaders in relation to their political skills and effectiveness. In a study of 26 school unit leaders, staff members and administrators and were asked to rate unit leaders’ effectiveness. Unit leaders completed a survey as a self-report measure of their general self-efficacy. Although leaders’ effectiveness was related to their political skills, it was not related to their level of general self-efficacy. Because a stronger relationship between leadership self-efficacy and leader effectiveness is found in the literature, in comparison to general efficacy, the present study focused on leadership self-efficacy.

In spite of the strong theoretical and empirical support for the positive relationship between leadership self-efficacy and leader effectiveness, some scholars have cautioned that self-efficacy or self-confidence can serve as a potential danger that could eventually undermine leader success. In a commentary on the perils of success, Miller (1997) warned that success breeds self-efficacy which can result in a continuation of the status quo and organizational inertia. Moreover, he suggested that self-efficacy can be biased and unrealistically high, which can be a danger for organizational decision-makers. In an empirical study, Whyte, Saks, and Hook (1997) found that high levels of self-efficacy predicted intentions to escalate commitment to a losing course of action. Based on these two studies, then, one might expect that in some situations high levels of self-efficacy may not necessarily correlate with leader success or effectiveness.

**Examining Follower Perceptions**

This study seeks to examine the relationship between follower perceptions of leader confidence, humility, and effectiveness. To provide a rationale for the instruments to be used for this study (as described in Chapter 3), a brief discussion of the measurement of follower perceptions is in order. Follower perceptions of leaders intuitively seem important because of
the logical connection between such perceptions and the quality of the leader-follower relationship and the follower’s willingness to be led by the leader. Several authors have discussed the importance of follower perceptions in relation to leadership. For example, Kouzes and Posner (1990) asserted, “Successful leadership depends far more upon the follower’s perceptions of the leader’s abilities than upon the leader’s own perceptions. Leadership is in the eye of the follower” (p. 29). Hollander (1992) also discussed the importance of follower perceptions and expectations of their leaders, asserting that “[r]ecent developments in the study of leadership have made evident the practical importance of follower perceptions on the leader-follower relationship” (p.44). One reason follower perceptions are important is that, according to implicit leadership theories, leaders may or may not fit the leadership prototypes held by followers—their conceptions and expectations of the ideal leader (what leadership is, looks like, or should be) (Chemers, 2002; Nielsen et al., 2010). In educational leadership, for example, research has shown that teachers tend to prefer leaders who are honest, competent, and flexible, and who demonstrate trust in teachers, listen to their ideas and feelings, increase their autonomy, and adopt democratic decision-making processes (Oplatka & Tako, 2009).

**Leader effectiveness.** As a review of the above studies on leader efficacy and leader effectiveness demonstrates, one of the most common methods of measuring leader effectiveness is via subjective evaluations from followers/subordinates, peers, and superiors (Hogan, Curphy, & Hogan, 1994; Reave, 2005). Although effectiveness ratings by peers and superiors can undoubtedly be enlightening, followers/subordinates are in a unique position to evaluate leader effectiveness, and research provides support for the use of follower/subordinate ratings to measure leader effectiveness (Hogan et al., 1994). For example, Kane et al. (2002, citing French & Raven, 1959 and Bass, 1990) included member perceptions of group leaders as a desired
group outcome because favorable perceptions support the leader’s referent power base which positively affects a leader’s influence. Moreover, Blase (1987) studied dimensions of school leadership from the teachers’ perspective. Accordingly, the present study measures leader effectiveness based on follower perceptions.

**Leader confidence.** The measurement of follower perceptions of leader confidence, however, is less straightforward. All of the quantitative studies that have examined leadership self-efficacy, as reviewed above, have measured this construct via leader self-report. However, the value of measuring follower perceptions of leader confidence is supported by both logic and research. One might reasonably argue that a leader who is not perceived as confident or efficacious will have difficulty inspiring others to overcome challenges or to believe in the leader’s ability to lead the organization. Further, some researchers have argued that not only do leaders’ personal feelings of self-confidence or self-perceptions of their leadership abilities influence their effectiveness; the degree to which a leader projects a self-confident image, or follower perceptions of leader confidence, also influence the leader’s effectiveness (Chemers et al., 2000; Kirkpatrick & Locke, 1991; Kouzes & Posner, 2002). Consistent with this line of thinking, De Cremer and van Knippenberg (2004) assessed MBA students’ perceptions of the self-confidence of their direct supervisors. For these reasons, then, the present study will examine leader confidence based on follower perceptions. Moreover, the present study’s approach to measuring leader confidence via follower perceptions provides an added dimension to the measurement and understanding of the contributions of self-confidence to effective leadership.

**Leader humility.** The importance of studying follower perceptions of leader humility is supported by studies that have shown that people who are perceived by as being arrogant or self-
aggrandizing are less admired or liked than those who are perceived as being modest and humble (Haan, Britt, & Weinstein, 2007; Hareli & Weiner, 2000; Schlenker & Leary, 1982; Wosinska, Dabul, Whetstone-Dion, & Cialdini, 1996). These findings imply that perceptions of humility may influence the degree of admiration and respect followers have for their leaders, which can obviously affect the quality of the leader-follower relationship and leader effectiveness.

Although some studies have created or used instruments that assess humility via self-report measures (e.g., Owens, 2009; Page & Wong, 2000; Taylor et al., 2007), one might reasonably suspect that self-ratings of humility are likely to be biased by one’s actual level of humility. As Ashton, Lee, and Goldberg (2004) have stated in describing the measurement of honesty-humility as a dimension of personality, “persons who are truly humble are likely to be reluctant to claim high levels of these traits” (p. 714). Worthington (2008) also asserted that scientists distrust a self-report of humility, noting that “if a man tells you how humble he is, that might in itself disqualify him from humility” (p. 270). Similarly, Rowatt et al. (2006) noted that “although some promising self report measures of humility–modesty exist, genuinely humble people might not report themselves as being humble and narcissists could easily control their responses on a self-report humility scale to create the appearance of humility” (p. 205). Tangney (2000) and Morris et al. (2005) also discussed problems with measuring humility via self-report. For these reasons, the present study will measure leader humility based on follower perceptions.

**Demographic Variables**

According to the literature, several demographic variables may be expected to predict leader effectiveness, and some may also predict leader confidence or humility. Thus, a brief review of the literature related to these demographic variables is in order, to provide a rationale for their inclusion in the present study—which included analyses of the impact of these variables.
on leader confidence, humility, and effectiveness and, when appropriate, controlled for their effects. Additionally, this study examined the degree to which these demographic variables, in addition to leader confidence and humility, predicted leader effectiveness. Where literature support for the inclusion of a particular demographic variable was weak or lacking, this section provides a rational basis for its inclusion in the present study.

**Sex of leaders and followers.** Several studies have shown that perceptions of leader effectiveness in the United States are likely to vary according to the sex of the leader and/or follower. More specifically, studies have shown that men are often perceived as being more effective leaders than women, and that women leaders are more likely to be perceived as effective by female followers than by male followers (Ayman et al., 2009; Douglas & Ammeter, 2004; Eagly & Karau, 2002; Prime et al., 2008; Turetgen, Unsal, & Erdem, 2008). Sex differences have also been found in studies on self-efficacy, with men demonstrating higher levels of self-efficacy than women, at least in Western cultures such as the United States (McCormick, Tanguma, & Lopez-Forment, 2003; Scholz, Dona, Sud, & Schwarzer, 2002). With regard to humility, Lee and Ashton (2004) found significant sex differences in honesty-humility as a personality trait, with women demonstrating higher levels than men. In a study of male hubris and female humility, Furnham, Hosoe, and Tang (2002) provided evidence of a consistent self-enhancing bias in men and a self-degrading bias in women in self-estimations of their own abilities—biases which potentially relate to both self-confidence/efficacy and humility.

**Race/ethnicity of leaders and followers.** Several studies have suggested a possible relationship between leader effectiveness and the race/ethnicity of leaders and followers. Chemers and Murphy (1995) cited research that provides evidence of ethnic differences in the characteristics considered prototypical for effective leaders, and suggested that racial differences
may serve as a barrier to building trust between leaders and followers. McGee Banks (2007) argued that race affects the representation of ethnic minorities in school leadership, and implied that race also impacts perceptions of effectiveness. Kirkman, Tesluk, and Rosen (2004) found that a dissimilarity between the racial composition of teams and their team leader was negatively related to team empowerment, as well as team leader ratings of team effectiveness.

**Education of leaders and followers.** In a study of personality and transformational leadership, Judge and Bono (2000) controlled for several demographic variables, including the leader’s educational attainment, and found that education positively predicted leader effectiveness. As an additional reason to include analysis of the leaders’ education in the present study, one might plausibly expect that higher levels of education may be associated with higher levels of confidence. Moreover, although research is lacking on the relationship between leader effectiveness and the education of followers, it is possible that followers with higher levels of education may have different perceptions of the meaning of “effective” leadership than those with lower levels of education. In other words, followers may have different expectations for their leaders based on their own level of education.

**Leadership (principalship) experience.** As Figure 2 on page 38 illustrates, and according to McCormick’s (2001) analysis, one might theoretically expect that leadership experience will be directly related to leadership self-efficacy/confidence and indirectly related to leader effectiveness. Although the link between leadership experience and leader effectiveness has not been consistently validated by empirical studies, there is some empirical evidence of a relationship between prior leadership experience and leader effectiveness (Avery et al., 2003).

**Follower (teaching) experience.** A body of literature exists on career stages of teacher development. According to the career stage approach of understanding teacher development,
teachers’ experiences in and attitudes toward work vary across the career life cycle (Oplatka & Tako, 2009, citing Hall, 2002). Oplatka and Tako examined how teachers’ constructions of desirable leadership qualities varied across three different career stages (early-, mid-, and late-career). They found subtle distinctions in teachers’ views of educational leadership across the career span. Early-career teachers held a more egocentric view of educational leadership, while later-career teachers presented a broader understanding of leadership. The notion that follower experience or maturity influences the leadership process is also supported by Hersey et al. (2001), who proposed that effective leadership styles depend on followers’ “readiness” or maturity, which is a function of their ability and willingness to accomplish a specific task. Ability is based upon the knowledge, experience, and skill that a follower brings to the task—three aspects of followership that clearly may change over time.

**Number of years worked together.** Graen and Uhl-Bien (1995) examined leader effectiveness as a function of the maturity of the relationships between leaders and followers, based on Leader-Member Exchange (LMX) theory. LMX theory is based on the premise that leader effectiveness is a function of the quality of relationship between leaders and followers. The theory proposes that the leader-follower relationship can be described in terms of a life cycle of relationship maturity that begins with a “stranger” phase, and then moves to an “acquaintance” stage, and finally to a “mature partnership” stage (Graen & Uhl-Bien, 1995). Accordingly, leader effectiveness depends on the extent to which leaders develop increasingly mature relationships or partnerships with followers over time.

**Number of followers (teachers) directly supervised.** In a study of personality and transformational leadership, Judge and Bono (2000) controlled for the number of individuals who directly reported to the leader. One of the components of transformational leadership is
individualized consideration, which is displayed when leaders pay attention to the followers’ developmental needs, and when they support and coach followers’ development (Bass, 1999). One might reasonably expect that leaders’ ability to display individualized consideration is influenced by the number of people they directly supervise. Because the present study will use transformational leadership as a measure of leader effectiveness, one might therefore expect leader effectiveness scores to vary somewhat as a function of the number of people supervised. Additionally, one might reasonably expect that leaders who supervise a large number of followers may be perceived by followers as being more distant than leaders who supervise fewer followers. According to Brown and Trevino (2006, citing Antonakis & Atwater, 2002), “[t]he distance between leaders and followers… has an important impact on how leaders are perceived, as well as the outcomes with which they are associated” (p. 611).

**Size of school (number of students).** In a study of leadership self-efficacy (LSE) and student learning (a measure of leader effectiveness in schools), Leithwood and Jantzi (2008) measured organizational characteristics that they believed were plausibly related to LSE, including school size, based on their review of the literature. They found that school size was a significant moderator of the relationship between LSE and student achievement. Because the present study also examined the LSE/confidence of educational leaders, it seemed reasonable to examine school size (operationalized as number of students who attend the school) in relation to leader confidence, humility, and effectiveness.

**Socioeconomic status of school district (Ohio Department of Education designated school district typology).** The relationship between a school district’s socioeconomic status (SES) and student achievement is well documented in the educational research literature. Assuming that the effectiveness of school leaders is judged to some degree by student
achievement levels, it follows that district SES may indirectly contribute to perceptions of leader effectiveness. It also seems plausible that school leaders in districts with high SES may feel more confident than leaders in districts with low SES in their ability to provide leadership that results in high levels of student achievement. In the State of Ohio, the Ohio Department of Education (ODE,) classifies all public school districts according to one of nine typologies, which are based largely on the district’s SES (Ohio Department of Education, 2007). For purposes of the present study, school district typology served as a proxy measure for the district’s SES.

**School performance (ODE report card grade).** ODE also assigns all public school districts in the State a report card grade, ranging from Excellent with Distinction to Academic Emergency, as an indicator of the school’s performance based on various measures of student achievement (Ohio Department of Education, 2008-2009). Assuming that the effectiveness of school leaders is judged to some degree by student achievement levels, it follows that a school’s ODE report card grade is likely to contribute to perceptions of leader effectiveness. It also seems reasonable to expect that leaders in schools with high report card grades may feel more confident in their leadership ability than those in schools with low report card grades.

**Summary**

To summarize the literature reviewed in this chapter, arrogance is an attribute that is largely associated with leader failure and ineffectiveness, whereas humility and self-confidence/efficacy are attributes that are largely associated with leader success and effectiveness. Previous research has established a clear and consistent connection between leader self-confidence/efficacy and leader effectiveness. More specifically, high levels of leader self-confidence have been found to be associated with high levels of leader effectiveness. However, there is some indication that excessive levels of self-confidence can negatively impact leader effectiveness.
The relationship between leader humility and leader effectiveness, on the other hand, is less substantiated by empirical research. Although humility in leadership has received growing scholarly attention in recent years, the majority of studies of examining the relationship between humility and leader effectiveness have been conceptual or theoretical in nature. Of the few empirical studies finding a direct relationship between humility and leader effectiveness, qualitative methods were used in each case to discover that connection. Although one quantitative study indirectly suggests a relationship between humility and leader effectiveness, it did not statistically analyze that relationship (or at least did not report such an analysis). For these reasons, further study of this relationship is warranted, using quantitative methods.

Moreover, no studies have directly examined the relationship between leader confidence and humility, although one qualitative study (Alston, 2005) found participant-leaders possessed both attributes. Two of the studies above (Harrison & Clough, 2006; Theoharis, 2008), both qualitative, suggested that effective leaders may be both humble and arrogant. Given the premise that humility is needed to prevent self-confidence from becoming over-inflated into arrogance, the relationship between leader confidence and humility is clearly a relevant question in the study of leader effectiveness. Further, no studies have been conducted to date on the relationship between the three variables of leader confidence, leader humility, and leader effectiveness. The present study begins to address this gap in the literature.

Additionally, several authors have called for the empirical study of humility in leadership. As mentioned previously, Tangney (2000) called for greater attention to the construct of humility in the social and psychological sciences and listed numerous research questions on humility that have implications for leadership. Owens (2009) said that although scholars have argued for the importance of humility within leadership and organizational
contexts, these relationships have not been yet been tested. Rowatt et al. (2006) recommended that future research investigate the link between measures of humility and observable behaviors such as leadership and examine whether measures of humility predict meaningful outcomes such as educational or corporate success. Exline and Geyer (2004) proposed that future research might examine whether humble people are more or less likely to be good leaders. Morris et al. (2005) suggested that one direction for future research on humility is to better understand humility’s specific contingencies in the leadership process.

Other authors have called for empirical research on specific models of leadership that include humility. Klenke (2005) proposed a model of leadership in which humility, as a spiritual value, is an antecedent that predict transformational (and transactional) leader behaviors, and called for empirical analysis of the model. Patterson (2003) proposed a theoretical model of servant leadership which included humility and called for future investigation of the model to include research on the follower perspective. Although the present study does not directly examine these models, it may nevertheless shed light on them.

Finally, Avolio et al. (2009), in describing future research directions for the study of leadership, stated that “[m]ore theoretical work and research will focus on the follower as a prime element in the leadership dynamic” (p. 442). The present study’s focus on follower perceptions of their leaders is consistent with such direction.
CHAPTER 3: METHODOLOGY

“Humility is a strange thing. The minute you think you have got it, you have lost it.”

(Swami Chinmayananda)

This chapter presents a summary of the methodology designed and applied to answer the research questions about the relationship between leader confidence, leader humility, and leader effectiveness. This chapter will explain the study’s research design, participants and procedures, instrumentation used, and methods of data analysis.

Research Design

This study used a correlational research design to examine the relationship among three quantitative variables: leader confidence, leader humility, and leader effectiveness (as measured by follower perceptions). The design was intended to reveal the degree to which leader confidence and leader humility—separately and in combination—were related to, or predictive of, leader effectiveness in the present study. The correlational research design was appropriate for this study because the study examined the relationship between two or more variables to “describe relationships that may exist among naturally occurring phenomena, without trying in any way to alter these phenomena” (Fraenkel & Wallen, 2008, p. 11) and because the study’s primary independent and dependent variables were quantitative.

Participants and Procedures

The participants in this study were 137 teachers in K-12 educational settings taking graduate-level Education courses at a mid-sized Midwest public university. Thus, participants were selected using a convenience sampling procedure. These participants were chosen because they work for men and women who serve in leadership positions (i.e., building principals) in
elementary, middle/junior high, and high schools. They were also chosen because of the feasibility of obtaining access to them, as graduate students, for purposes of data collection.

To access participants and collect data, after obtaining approval from the institution’s Human Subjects Review Board, the researcher contacted the instructors of graduate-level Education classes offered at a mid-sized Midwest public university and asked their permission to administer a 20- to 25-minute survey to their students. The names of instructors who provided access to their students were entered in a lottery in which each instructor had a chance to win a $100 award. In each participating class, students who participated in the study were given the opportunity to enter their names into a lottery to win one of several $5 gift cards. To ensure anonymity and confidentiality, the survey did not ask participants to provide either their name, their principals’ name, or the name of their school district or school building. For the gift card lottery, participants’ names were collected and stored separately from their survey answer sheets, so that no connection between the two could be made.

For each class in which the survey was administered, all students in the class were encouraged to complete the survey, regardless of their current occupational status. Consequently, some of the students who completed the survey were not current employed as teachers in K-12 educational settings. Because this study was designed to assess teachers’ perceptions of their principals, one of the questions of the survey asked participants to indicate their current occupation. Only the surveys of those who indicated “teacher” as their current occupation were counted as participants and included in the data analysis for this study.

To ensure consistency in the process of data collection, the researcher followed a set protocol for each administration of the survey. Additionally, to ensure that all data were collected within one semester, it was necessary for the researcher to request the instructors of
some of the classes to administer the survey to their classes on behalf of the researcher. The instructors followed the same protocol as the researcher while administering the surveys.

Instrumentation

To collect data for this study, the researcher created and administered a *Perceptions of School Leadership Survey*. The survey was comprised of four sections: demographics, a scale measuring perceptions of principals’ humility, a scale measuring perceptions of principals’ confidence, and a scale measuring perceptions of principals’ effectiveness.

**Demographic items.** As described previously in Chapter 2, leader effectiveness has been found to be impacted not only by affective characteristics of the leader (such as leader confidence and humility), but also by the demographic characteristics of leaders, followers, and the organizational context (in this case, school demographics). Therefore, in order to best examine the relationship between leader confidence, humility and effectiveness, it was necessary to gather demographic data. Accordingly, the demographics section of the survey included 16 questions concerning participant demographics (sex, race/ethnicity, highest level of education, teaching experience, current occupation), principal demographics (sex, race/ethnicity, highest level of education, experience as a principal), and school demographics (ODE-designated district typology, school report card grade, number of students in the school, and number of teachers supervised by the principal). The survey also included one question concerning the number of years participants had worked with their principals.

The scales measuring humility, confidence, and leader effectiveness are described in detail below. The scales for humility and confidence are reproduced in Appendix C. Because of copyright restrictions, a limited sample of items from the scale for leader effectiveness is
included in Appendix C. Reliability coefficients for each scale in the present study are reported in Chapter 4.

**Leader Humility.** To measure participants’ perceptions of leader humility, this study used the Owens Humility Scale (Other-report form) developed by Owens (2009). Originally a 9-item scale, the current version contains 11 items, with a reported alpha reliability coefficient of .90 (B. P. Owens, personal communication, July 12-13, 2010). It contains three subscales: Teachability, Appreciation (of others’ strengths and contributions), and Self-Awareness. Using a Likert scale of 1 (strongly disagree) to 5 (strongly agree), the instrument asks participants to rate their level of agreement with statements about their leaders’ humility-related behaviors. Examples of items included “My principal is willing to learn from others” (Teachability); “My principal shows appreciation for the unique contributions of others” (Appreciation); and “My principal admits it when he or she makes mistakes” (Self-Awareness). High scores on this scale indicated high humility, while low scores indicated low humility.

**Leader Confidence.** As indicated in the review of the literature related to this topic, previous studies have measured leader confidence almost exclusively in terms of self-reports of leadership efficacy—in other words, leaders rating their beliefs or feelings of confidence related to their leadership abilities. However, scales used to measure self-reported leadership efficacy could not be used for the present study, which sought to measure follower perceptions of leader confidence. To measure such perceptions, it was therefore necessary for the researcher to develop a scale unique to this study.

To measure follower (teacher) perceptions of leader (principals’) confidence, the researcher developed a 21-item scale with two subscales: eight (8) items designed to measure perceptions of principals’ general confidence in their leadership abilities (hereinafter referred to
as the Leader Efficacy subscale), 12 items designed to measure perceptions of principals’ confidence related to specific leadership tasks (hereinafter referred to as the Task Confidence subscale), and one question asking participants to rate their principals’ over-all level of leadership confidence. The Leader Efficacy subscale was constructed to reflect dimensions of self-efficacy found in the literature, including effort expenditures and persistence, goal-setting, activity selection, and emotional stability, as well as belief in general leadership capabilities. The Task Confidence subscale was constructed to reflect principals’ confidence related to specific tasks that are common to leadership as identified in the literature—tasks that are common to leaders across a broad spectrum of organizational types, not specific to leaders in K-12 educational settings. Using a Likert scale of 1 (strongly disagree) to 5 (strongly agree), the instrument asks participants to rate their level of agreement with statements concerning their leaders’ demonstration of confident behaviors. Items from the Leader Efficacy subscale included (but were not limited to) the following: “My principal works hard to achieve his/her goals even when faced with adversity or obstacles;” “My principal is willing to take on difficult tasks and situations;” and “My principal is calm under pressure.” Items from the Task Confidence subscale began with the statement, “My principal displays/demonstrates confidence that he/she can…” Items related to this statement included (but were not limited to) the following: “Influence staff to pursue a desired course of direction;” “Motivate staff;” and “Lead change initiatives in the school.” High scores on these subscales indicated high confidence, while low scores indicated low confidence.

To develop the Confidence scale, the researcher first drafted 30 items drawn from a thorough review of the literature on Leadership Self-Efficacy and from instruments used to measure Leadership Self-Efficacy and similar constructs in other studies. To establish content
validity, the researcher obtained feedback on the initial 30 items from 25 educators, including three university professors (one of whom is a former School Superintendent), seven principals, one assistant principal, a former principal, and 13 teachers. These individuals provided feedback in response to the following questions: (a) Does the item reflect behaviors that are observable by teachers? (b) Do teachers generally know their principals well enough to respond to the item? (c) Is the item clearly understandable (vs. subject to different interpretations)? (d) Does the item appear to be redundant with other items? Based on the feedback obtained, several items were eliminated and many of the remaining items were reworded to make them more clear. In addition, some of the items were eliminated because they were negatively worded (e.g., “My principal gets stressed out easily”). The final 21 items were those judged to reflect principal behaviors that are observable by teachers, principal qualities with which most teachers are familiar enough to have formed impressions, and that represent the dimensions of Leadership Self-Efficacy from the literature. Table 1 identifies selected literature supporting each item in the two Confidence subscales. (As a rating of over-all leadership confidence, item 46 it is not included in Table 1.)

**Leader Effectiveness.** To measure participants’ perceptions of leader effectiveness, this study used the Transformational Leadership subscale (20 items) and the Outcomes of Leadership subscale (9 items) from the Multifactor Leadership Questionnaire (MLQ) 5x-Short (Avolio & Bass, 1995). The Transformational Leadership subscale is itself comprised of subscales for Idealized Influence (including Idealized Attributes and Idealized Behaviors), Inspirational Motivation, Intellectual Stimulation, and Individualized Consideration). The Outcomes of Leadership subscale measures the leader’s impact on followers and is comprised of subscales for Extra Effort, Effectiveness, and Satisfaction. The Transformational Leadership scale was used
Table 1

*Selected Literature Support for Confidence Scale Items*

<table>
<thead>
<tr>
<th>#</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>26</td>
<td>Bandura &amp; Wood (1989); Chemers, Watson, &amp; May (2000); McCormick (2001)</td>
</tr>
<tr>
<td>27</td>
<td>Bandura (1982); IPIP (Industry/Perseverance/Persistence scale by Peterson &amp; Seligman, 2004)</td>
</tr>
<tr>
<td>28</td>
<td>Bandura (1982); IPIP (Competence scale by Cloninger, Przybeck, Svrakic, &amp; Wetzel, 1994)</td>
</tr>
<tr>
<td>29</td>
<td>Chemers, Watson, &amp; May (2000); IPIP (Anxiety scale of HEXACO Personality Inventory by Lee &amp; Ashton, 2004); Kirkpatrick &amp; Locke (1991)</td>
</tr>
<tr>
<td>30</td>
<td>Bosscher &amp; Smit (1998); Kirkpatrick &amp; Locke (1991); Sherer et al. (1982)</td>
</tr>
<tr>
<td>31</td>
<td>Bandura &amp; Wood (1989); Kirkpatrick &amp; Locke (1991); Leithwood &amp; Jantzi (2008)</td>
</tr>
<tr>
<td>32</td>
<td>Bosscher &amp; Smit (1998); Chen, Gully &amp; Eden, 2001; IPIP (Hope/Optimism scale by Sherer et al., 1982)</td>
</tr>
<tr>
<td>33</td>
<td>IPIP (Hope/Optimism scale by Peterson &amp; Seligman, 2004); Kirkpatrick &amp; Locke (1991)</td>
</tr>
<tr>
<td>34</td>
<td>Anderson, Krajewski, Goffin, &amp; Jackson (2008); Chemers, Watson, &amp; May (2000); Hoyt (2005)</td>
</tr>
<tr>
<td>40</td>
<td>Hersey, Blanchard, &amp; Johnson (2001); Kouzes &amp; Posner (2002)</td>
</tr>
<tr>
<td>42</td>
<td>Leithwood &amp; Jantzi (2008); McCollum &amp; Kajs (2009)</td>
</tr>
<tr>
<td>43</td>
<td>Kozlowski &amp; Doherty (1988); McCollum &amp; Kajs (2009); Owens (2001)</td>
</tr>
<tr>
<td>44</td>
<td>Anderson, Krajewski, Goffin, &amp; Jackson (2008); Daly &amp; Chrispeels (2008)</td>
</tr>
<tr>
<td>45</td>
<td>Anderson, Krajewski, Goffin, &amp; Jackson (2008); McCollum &amp; Kajs (2009); Villanueva &amp; Sanchez (2007)</td>
</tr>
</tbody>
</table>

Note: IPIP=International Personality Item Pool
for the present study because transformational leadership has been repeatedly found to be associated with perceptions of leader effectiveness and is widely viewed as encompassing effective leader behaviors (see, e.g., Avolio et al., 2009; Judge & Bono, 2000; Judge & Piccolo, 2004). The Outcomes of Leadership scale was used for this study because it contains a subscale for effectiveness and measures the leader’s impact on followers’ effort and satisfaction—factors which are of central concern to this study.

Although the MLQ 5x-Short also includes scales for Transactional Leadership and Passive/Avoidance Leadership, these scales were not used for the present study for three reasons: (a) transactional leadership has not consistently been found to predict leader effectiveness (Lowe et al., 1996); (b) passive/avoidant leadership does not appear to be directly relevant to the research questions; (c) using only the Transformational Leadership and Outcomes of Leadership subscales—the two that are most relevant to this study—reduced the length of time required to complete the survey, which helped make the study more acceptable to the instructors whose approval was needed for the researcher to gain access to the participants.

Avolio and Bass (2007) have described the Transformational Leadership subscales as follows. (Appendix D contains more detailed descriptions of each subscale.)

- The Idealized Influence-Attributes scale identifies leaders who are able to build trust in their followers. Idealized Influence-Behaviors scale identifies leaders who act with integrity.
- The Inspirational Motivation scale identifies leaders who inspire others…. Inspirational leaders articulate, in simple ways, shared goals and mutual understanding of what is right and important.
• The Intellectual Stimulation scale identifies leaders who are able to encourage innovative thinking.

• The Individual Consideration scale identifies leaders who are able to coach people. It means understanding and sharing in others' concerns and developmental needs and treating each individual uniquely.

Avolio and Bass (2007) have described the three Outcomes of Leadership subscales as follows. (Appendix D contains more detailed descriptions of each subscale.)

• The Extra Effort scale identifies leaders who are able to generate extra effort in their followers.

• The Effectiveness scale identifies leaders who are perceived to effectively satisfy the professional needs of their followers.

• The Satisfaction scale identifies leaders who are able to generate satisfaction in their followers.

The MLQ 5x-Short includes both a self-rating instrument (in which leaders rate themselves) and an other-rating instrument (in which leaders are rated by others). Because the present study is concerned with follower perceptions of leader effectiveness, the other-rating instrument (Rater form) was used in this study. The instrument asks participants to rate how frequently their supervisor demonstrates leadership behaviors, using a Likert scale of 1 (not at all) to 5 (frequently, if not always). Examples of items included “Emphasizes the importance of having a collective sense of mission” (Idealized Influence/Behaviors); “Talks enthusiastically about what needs to be accomplished” (Inspirational Motivation); “Suggests new ways of looking at how to complete assignments” (Intellectual Stimulation); “Considers me as having different needs, abilities, and aspirations from others” (Individualized Consideration); and
“Increases my willingness to try harder” (Extra Effort). High scores on Transformational Leadership and Outcomes of Leadership indicate high levels of leader effectiveness.

The MLQ Form 5x (MLQ 5x) has been used to measure leader effectiveness in a variety of organizational settings and cultures. It has been extensively researched and has consistently been shown to be a valid and reliable measure of transformational (and transactional) leadership. Reiss (2000) provided an extensive review of the literature related to the MLQ and the MLQ 5x. Additional analyses of the MLQ 5x are provided by Antonakis, Avolio and Sivasubramaniam (2003), Avolio, Bass, and Jung (1999), and Muenjohn and Armstrong (2008). These studies support the use of the MLQ 5x as a valid measure of leader effectiveness.

Descriptive statistics and reliabilities for the MLQ 5x are presented in the MLQ Manual (Avolio & Bass, 2004). According to the technical report, reliability coefficients for the subscales to be used in this study (based on ratings given by those at a lower level than the focal leader, in studies in the United States) are as follows: Idealized Attributes, .77; Idealized Behaviors, .70; Inspirational Motivation, .83; Intellectual Stimulation, .75; Individualized Consideration, .80; Extra Effort, .84; Effectiveness, .84; Satisfaction, .84. These reliabilities exceed standard cut offs for internal consistency recommended in the literature.

Research Questions

1. What is the relationship between leader confidence, humility, and effectiveness? (Do followers perceive that leader humility is compatible with leader confidence? Do they perceive that leaders are both humble and effective?)

2. Do leader confidence, humility, and effectiveness differ by demographic variables?

3. Does leader effectiveness differ by the level of leader confidence and humility, while controlling for relevant demographic variables?
a. Are there significant mean differences for leader effectiveness by leader confidence level?

b. Are there significant mean differences for leader effectiveness by leader humility level?

c. Is there a significant interaction on leader effectiveness between leader confidence and humility?

4. Do leader confidence and humility significantly predict leader effectiveness?

   a. Which subscales of confidence and humility significantly predict leader effectiveness?

5. Which of the study’s variables (i.e., confidence, humility, sex, level of education, leadership experience, and race/ethnicity of the leader; sex, level of education, teaching experience and race/ethnicity of the follower; number of years worked together; ODE designated school district typology and school report card grade; the number of followers the leader supervises, and numbers of students in the school) significantly predict leader effectiveness?

**Data Analysis**

**Variables.** The primary variables for this study were Confidence, Humility, and Leader Effectiveness and its subscales of Transformational Leadership and Outcomes of Leadership. Secondary variables for the study were the demographic characteristics of principals, teachers, and their schools. Demographic variables were treated as either categorical (nominal) variables or as ordinal variables, as indicated in Table 2, which also presents codes used for analysis of each demographic variable.

**Score computation.** After data were scanned, they were uploaded into an Excel file. Each primary variable (Confidence, Humility, Leader Effectiveness, Transformational Leadership, and Outcomes of Leadership) was created within Excel by calculating the mean score of variable items for each individual participant. Therefore, Humility scores represent the
Table 2

Demographic Variable Codings

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coding</th>
<th>Type of Variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex - Principal, Teacher</td>
<td>1=female; 2=male</td>
<td>Nominal</td>
</tr>
<tr>
<td>Highest Level of Education-Principal</td>
<td>1=Masters Degree; 2=Specialist Degree; 3=Doctoral Degree</td>
<td>Ordinal</td>
</tr>
<tr>
<td>Highest Level of Education-Teacher</td>
<td>1=Bachelors Degree; 2=Masters Degree; 3=Specialist; 4=Other</td>
<td>Ordinal</td>
</tr>
<tr>
<td>Race/Ethnicity – Principal, Teacher</td>
<td>1=Caucasian; 2=African American; 3=Hispanic/Latino; 4=Other</td>
<td>Nominal</td>
</tr>
<tr>
<td>Years of Teaching Experience – Teacher</td>
<td>1=0 to 2 years; 2=3 to 5 years; 3=6 to 10 years; 4= 11 to 15 years; 5=16 or more years</td>
<td>Ordinal</td>
</tr>
<tr>
<td>Years of Experience as a Principal</td>
<td>1=0 to 2 years; 2=3 to 5 years; 3=6 to 10 years; 4= 11 to 15 years; 5=16 or more years</td>
<td>Ordinal</td>
</tr>
<tr>
<td>Number of Years Worked Together</td>
<td>1=0 to 2 years; 2=3 to 5 years; 3=6 to 10 years; 4= 11 to 15 years; 5=16 or more years</td>
<td>Ordinal</td>
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<tr>
<td>School District Typology</td>
<td>1=Rural/Agricultural, Low Median Income; 2=Rural/Agricultural, Low Poverty, Low to Moderate Median Income; 3=Rural/Small Town, Moderate to High Median Income; 4=Urban, Low Median Income; 5=Major Urban/Very High Poverty; 6=Urban/Suburban, High Median Income; 7=Urban/Suburban, Very High Median Income; 8=Vocational School</td>
<td>Ordinal</td>
</tr>
<tr>
<td>School Building Report Card Grade</td>
<td>0=Academic Emergency/Watch; 1=Continuous Improvement; 2=Effective; 3=Excellent; 4=Excellent with Distinction</td>
<td>Ordinal</td>
</tr>
<tr>
<td>Number of Teachers Supervised</td>
<td>1=100 or more; 2=75 to 99; 3=50 to 74; 4=25 to 49; 5= fewer than 25</td>
<td>Ordinal</td>
</tr>
<tr>
<td>Number of Students Attending the School</td>
<td>1=500 or more; 2=400 to 499; 3=300 to 399; 4=200 to 299; 5=fewer than 200</td>
<td>Ordinal</td>
</tr>
</tbody>
</table>
mean of items 15 to 25 for each participant, Confidence scores represent the mean of items 26 to 46, Leader Effectiveness scores represent the mean of items 47 to 75, Transformational Leadership scores represent the mean of items 47 to 66, and Outcomes of Leadership scores represent the mean of items 67 to 75. Variables for the subscales of Confidence (Leader Efficacy and Task Confidence) and of Humility (Teachability, Appreciation, and Self-Awareness) were created in the same way. Mean scores for all primary variables and their subscales had a potential range of 1 to 5. After variables were created within Excel, the data were then uploaded into Statistical Package for the Social Sciences (SPSS), which was used to conduct all analyses.

**Inferential Statistics.** Table 3 presents the inferential statistics used for each research question. To assess the relationship between Confidence and its subscales, Humility and its subscales, and Leader Effectiveness and its subscales (RQ1) *Pearson r* correlation coefficients were computed. The *Pearson r* coefficient is an index of the strength of relationship between two variables and is appropriate to use when data for both variables are quantitative (Fraenkel & Wallen, 2008).

For the analysis of RQ2, five series of univariate Analyses of Variance (ANOVAs) were conducted. The univariate ANOVA is “a hypothesis testing procedure that simultaneously evaluates the significance of mean differences on a dependent variable between two or more treatment conditions or groups” (Mertler & Vannatta, 2005, p. 67, citing Agresti & Finlay, 1997)—the treatment conditions or groups being defined by the various levels of the independent variable. In each series of ANOVAS, one of the study’s primary variables (Confidence,
Table 3

*Research Questions and Corresponding Inferential Statistical Analyses*

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Independent Variable(s)</th>
<th>Dependent Variable(s)</th>
<th>Covariates</th>
<th>Data Analysis (Inferential Test)</th>
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</thead>
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<tr>
<td>1. What is the relationship between leader confidence, humility &amp; effectiveness?</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td><em>Pearson r</em> correlations</td>
</tr>
<tr>
<td>2. Do leader confidence, humility, and effectiveness differ by demographic variables?</td>
<td>• Sex (Principal,Teacher) • Education (Principal,Teacher) • Race (Principal,Teacher) • Experience (Principal,Teacher) • Years Worked Together • District Typology • School Report Card Grade • Number of Teachers Supervised • Number of Students</td>
<td>• Leader Effectiveness • Transformational Leadership • Outcomes of Leadership • Confidence • Humility</td>
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<td>ANOVA</td>
</tr>
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Table 3 (Continued)

**Research Questions and Corresponding Inferential Statistical Analyses**

<table>
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<tr>
<th>Research Question</th>
<th>Independent Variable(s)</th>
<th>Dependent Variable(s)</th>
<th>Covariates</th>
<th>Data Analysis (Inferential Test)</th>
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<td>3a. Are there significant mean differences for leader effectiveness by leader confidence level?</td>
<td>3a. Confidence</td>
<td>3a, 3b, and 3c:</td>
<td>3a, 3b, and 3c: Demographic variables for which significant differences were found in the analyses of RQ2</td>
<td>3a, 3b, and 3c: ANCOVA</td>
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<td>3b. Are there significant mean differences for leader effectiveness by leader humility level?</td>
<td>3b. Humility</td>
<td>3a, 3b, and 3c:</td>
<td>Transformational Leadership, Outcomes of Leadership</td>
<td>3a, 3b, and 3c: ANCOVA</td>
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<td>3c. Is there a significant interaction on leader effectiveness between leader confidence and humility?</td>
<td>3c. Confidence and Humility</td>
<td>3a, 3b, and 3c:</td>
<td>Transformational Leadership, Outcomes of Leadership</td>
<td>3a, 3b, and 3c: ANCOVA</td>
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<tr>
<td>5. Which of the study’s variables significantly predict leader effectiveness?</td>
<td>Confidence, Humility, and all Demographic variables (see RQ 2 above)</td>
<td>4 and 4a:</td>
<td>n/a</td>
<td>Forward Multiple Regression</td>
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Humility, Leader Effectiveness, Transformational Leadership, and Outcomes of Leadership) was entered as the dependent variable; demographic variables were entered as the independent variables. The results of analyses of RQ2 were used to identify demographic variables that might influence the relationship between Confidence, Humility, and Leader Effectiveness and its subscales, and those demographic variables were statistically controlled for in the analyses of RQ3.

For the analyses of RQ3, Confidence and Humility were recoded into categories of Low, Medium, and High. A series of three univariate Analyses of Covariance (ANCOVAs) was conducted for RQ3a and RQ3b; a series of three Factorial ANCOVAs was conducted for RQ3c. A Factorial ANCOVA is appropriate to use to evaluate the significance of mean differences in a quantitative dependent variable (e.g., Leader Effectiveness) between two or more groups (e.g., Low, Medium, High) as defined by the levels (categories) of two or more independent variables (e.g., Confidence, Humility), while controlling for or partialing out the effects of concomitant variables that also demonstrate an effect on the dependent variable (Mertler & Vannatta, 2005). In each series of ANCOVAs for RQ3, Leader Effectiveness, Transformational Leadership, or Outcomes of Leadership was entered as the dependent variable. Categorical Confidence and/or categorical Humility were entered as the independent variables. Demographic variables for which significant differences were found in the analyses of RQ2 were entered as covariates.

For the analysis of RQ4, three standard multiple regression analyses were conducted, with Confidence and Humility entered as the independent variables and Leader Effectiveness and its subscales entered as the dependent variables. Multiple regression is used to create the linear combination of two or more quantitative variables that best predicts the dependent variable. In standard multiple regression, the effect of each independent variable on the dependent variable is
evaluated in terms of what it uniquely adds to the prediction of the dependent variable (Mertler & Vannatta, 2005).

For the analysis of RQ4a, three multiple regression analyses using the Forward method were conducted, with Teachability, Appreciation, and Self-Awareness (subscales of Humility) and Leader Efficacy and Task Confidence (subscales of Confidence) entered as the independent variables in each analysis. Leader Effectiveness and its subscales were the dependent variables in these analyses. The forward selection method of multiple regression is often used in studies that are exploratory in nature (Mertler & Vannatta, 2005). With this method, SPSS identifies and selects the independent variables that significantly contribute to the dependent variable, in descending levels of contribution.

Finally, for the analyses of RQ 5, three multiple regression analyses using the Forward method were again conducted, with Confidence, Humility, and all demographic variables entered as independent variables and Leader Effectiveness and its subscales entered as dependent variables.
CHAPTER 4: RESULTS

“The road to success leads through the valley of humility.”

(Joseph J. Lamb)

This chapter will present the results of analyses of the data from the Perceptions of School Leadership survey completed by the study’s participants. It will begin with a review of the demographics of the participants, their principals, and the schools employing them. It will then present a review of the scales and subscales analyzed, along with item statistics. The chapter will then present results related to each research question.

Demographics

Participants. Of the 137 participants (teachers), the majority (66.4%) were female. Most (61.3%) had a Bachelor’s degree as their highest level of education, with over a third (33.7%) having completed a Master’s degree and only 1.5% having completed a Specialist degree. The sample was overwhelmingly White: 92.7% of participants identified themselves as Caucasian, 3.6% (five) as African Americans, 2.9% (four) as Hispanic or Latino, and 0.7% (one) as Other. Most participants had from three to ten years of teaching experience (46.7% with three to five years; 23.4% with six to ten years); 13.9% of participants had 11 to 15 years of teaching experience, and 8.8% had two or fewer years and 7.3% had 16 or more years of experience.

Principals. With regard to the principals to whom participants reported, 40.1% were female; 59.9% were male. Principals were overwhelmingly White, with 96.4% reported as Caucasian, 2.9% (four) as African American, and 0.7% (one) as Hispanic or Latino. Of the 112 participants who provided information concerning their principals’ level of education and years of experience, 90.2% reported their principal as having completed a Master’s degree as their highest level of education; 6.3% a Specialist degree, and 3.6% a Doctorate. The majority of
participants reported their principal as having from three to ten years of experience (27.7% from three to five years; 25.9% from six to ten years); 19.6% of principals were reported to have two or less years of experience; 17.0% as having 11 to 15 years and 9.8% as having 16 or more years of experience as a principal.

**Years worked together.** One item on the survey asked participants to identify the number of years they had worked with their principal. The vast majority of participants had worked with their principal for five or fewer years (43.1% two or fewer years; 48.9% three to five years). Only 8% of participants had worked with their principal for six or more years.

**Schools.** Of the 110 participants who indicated their district typology, the largest categories represented were those of Rural/Agricultural, Low Poverty, Low to Moderate Median Income (33.6%) and Urban/Suburban, High Median Income (27.3%). These were followed by Urban, Low Median Income (11.8%); Rural/Small Town, Moderate to High Median Income (8.2%); Rural/Agricultural, Low Median Income (7.3%); Major Urban, Very High Poverty (6.4%); and Vocational Schools (5.5%). Of the 112 who indicated their school’s report card grade, schools that received a grade of Excellent comprised the largest category (46.4%), followed by Effective (20.5%), Excellent with Distinction (16.1%), Continuous Improvement (12.5%) and Academic Emergency or Watch (4.5%). Participants were also asked to indicate the number of teachers supervised by their principal. The vast majority of principals supervised fewer than 50 teachers, with 34.6% supervising fewer than 25 teachers and 44.9% supervising 25 to 49 teachers. Only 10.3% of principals supervised 50 to 74 teachers, while 7.4% supervised 75 to 99 teachers and 2.9% supervised 100 or more teachers. Finally, participants were asked to indicate the number of students who attend their school building. Most school buildings that were represented had at least 300 students (20.7% with 300-399 students, 20.0% with 400-499
students, and 36.3% with 500 or more students). Only 14.1% worked in buildings with 200-299 students, while 8.9% worked in buildings with fewer than 200 students.

**Item and Reliability Statistics**

As indicated in Chapter 3, the Perceptions of School Leadership Survey measured the three primary variables in this study: Humility (11 items); Confidence (21 items) and Leader Effectiveness (29 items). The Humility scale was comprised of three subscales: Teachability (4 items), Appreciation (3 items), and Self-Awareness (4 items). The Confidence scale was comprised of one general question and two subscales: Leader Efficacy (8 items) and Task Confidence (12 items). The Leader Effectiveness scale was comprised of two subscales: Transformational Leadership and Outcomes of Leadership. Although both of the Leader Effectiveness subscales have been divided into additional subscales by the authors of the Multifactor Leadership Questionnaire as described in Chapter 3, analysis of Leader Effectiveness in the present study was limited to Transformational Leadership and Outcomes of Leadership.

Table 4 presents reliability statistics and item numbers for each scale and subscale. All scales and subscales had a high level of reliability, with reliability coefficients ranging from .87 to .98. Tables 5, 6, and 7 present descriptive statistics for the items in each scale. Although the response pattern to item 54 was quite different from that of other items, a review of reliability statistics related to this item revealed no problems with its reliability; therefore, it was included in all analyses.
### Table 4

**Reliability Statistics**

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### Table 5

**Humility Scale Item Descriptives**

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<th>%N</th>
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*SD=Strongly Disagree; D=Disagree; N=Neutral; A=Agree; SA=Strongly Agree*
Table 6

Confidence Scale Item Descriptives

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Note: *SD=Strongly Disagree; D=Disagree; N=Neutral; A=Agree; SA=Strongly Agree
Table 7

Leader Effectiveness Scale Item Descriptives

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<td>43.1</td>
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<td>3.52</td>
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</tbody>
</table>

*Note: SD=Strongly Disagree; D=Disagree; N=Neutral; A=Agree; SA=Strongly Agree*

**Pre-Analysis Data Screening**

Prior to analysis, data were screened following procedures outlined in Mertler and Vannatta (2005). Although statistical tests of normality (i.e., Kolmogorov-Smirnov and Shapiro-
Wilk) indicated non-normal distributions for each scale and subscale, a review of the measures of central tendency (mean, median and mode) of each distribution and visual inspection of the histograms and normal Q-Q plots indicated the distributions were sufficiently normal to proceed with further analysis. Although three univariate outliers were identified for Confidence, these cases were nonetheless included in all univariate analyses, based on visual inspection of the histogram for Confidence. Evaluation of multivariate outliers using Mahalanobis Distance in multiple regression and a Chi Square critical value of 16.268 revealed four multivariate outliers for Leader Effectiveness and the Outcomes of Leadership subscale and three multivariate outliers for the Transformational Leadership subscale. Because elimination of these cases appeared to improve multivariate normality based on visual inspection of bivariate and residual scatterplots, these cases were excluded from all multivariate tests (i.e., the multiple regression analyses conducted for Research Questions 4 and 5).

**Research Question 1: Primary Variable Relationships**

To address Research Question (RQ) 1 (What is the relationship between leader confidence, humility and effectiveness?), Pearson correlation coefficients were computed for each primary variable combination and their major subscales, as presented in Table 8. All of the correlations were statistically significant at $p<.001$ and ranged between .52 and .75 (excluding correlations between scales and their own subscales). A strong positive relationship was found between Leader Effectiveness and both Confidence and Humility, with Humility having a slightly stronger relationship than Confidence with Leader Effectiveness. A strong positive relationship was also found between Confidence and Humility.
Table 8

*Pearson r Correlations Between Primary Variables and Major Subscales*

<table>
<thead>
<tr>
<th>Measure</th>
<th>1</th>
<th>1A</th>
<th>1B</th>
<th>1C</th>
<th>2</th>
<th>2A</th>
<th>2B</th>
<th>3</th>
<th>3A</th>
<th>3B</th>
</tr>
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<tbody>
<tr>
<td>1. Humility</td>
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<td></td>
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<td></td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>A. Teachability</td>
<td>.97</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B. Appreciation</td>
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<td>.86</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C. Self-Awareness</td>
<td>.95</td>
<td>.89</td>
<td>.80</td>
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<td></td>
</tr>
<tr>
<td>2. Confidence</td>
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<td>.69</td>
<td>.69</td>
<td>.70</td>
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<td></td>
</tr>
<tr>
<td>A. Leader Efficacy</td>
<td>.75</td>
<td>.71</td>
<td>.72</td>
<td>.72</td>
<td>.92</td>
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<td>B. Task Confidence</td>
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<td>.63</td>
<td>.62</td>
<td>.65</td>
<td>.97</td>
<td>.81</td>
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<tr>
<td>3. Leader Effectiveness</td>
<td>.69</td>
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<td>.68</td>
<td>.67</td>
<td>.64</td>
<td>.62</td>
<td>.59</td>
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<td></td>
</tr>
<tr>
<td>A. Transform’al Leadership</td>
<td>.68</td>
<td>.63</td>
<td>.67</td>
<td>.65</td>
<td>.65</td>
<td>.61</td>
<td>.61</td>
<td>.99</td>
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<tr>
<td>B. Outcomes of Leadership</td>
<td>.67</td>
<td>.62</td>
<td>.65</td>
<td>.64</td>
<td>.59</td>
<td>.60</td>
<td>.52</td>
<td>.96</td>
<td>.90</td>
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</tbody>
</table>

*Note: n=137; all correlation coefficients significant at p≤.001*
Research Question 2: Demographic Differences

To address RQ2 (Do leader confidence, humility, and effectiveness differ by demographic variables?) five series of Univariate Analyses of Variance (ANOVAs) were conducted, each series with a different dependent variable: Leader Effectiveness, Transformational Leadership, Outcomes of Leadership, Confidence, and Humility. For each analysis, one demographic variable (Participant Sex, Level of Education, Race, Teaching Experience; Principal Sex, Level of Education, Race, Experience; Years Worked Together; District Typology, Report Card Grade, Number Supervised, Number of Students) was entered as the independent variable. Due to the low number of respondents in some categories, Participant Race and Principal Race were recoded into two categories (Caucasian, Other). District Typology was recoded into three categories (Low, Medium, High) based on median income or poverty level. Table 9 presents recoded categories of District Typologies, and the number in each category. Districts that were designated as having low median income or very high poverty were categorized as “Low;” those designated as having high median income were categorized as “High;” those designated as having low to moderate or moderate to high median income were designated as “Medium.” (Vocational Schools were excluded due to lack of income designation. None of the participants worked in schools designated as Urban/Suburban, Very High Median Income.)

The first three series of ANOVAs were conducted to assess demographic differences in Leader Effectiveness and its two subscales. Significant differences in Leader Effectiveness were found for participant Teaching Experience, $F(4, 132)=2.718$, $p=.032$, and school Report Card Grade, $F(4, 107)=3.452$, $p=.011$. Significant differences in Transformational Leadership were found for Teaching Experience, $F(4, 132)=2.666$, $p=.035$, Report Card Grade, $F(4, 107)=4.208$,
Table 9

*Recoded Categories of District Typologies by Income Level*

<table>
<thead>
<tr>
<th>ODE Designation</th>
<th>Recoded Category</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural/Agricultural/High Poverty, Low Median Income</td>
<td>Low</td>
<td>8</td>
</tr>
<tr>
<td>Rural/Agricultural, Low Poverty, Low to Moderate Median income</td>
<td>Medium</td>
<td>37</td>
</tr>
<tr>
<td>Rural/Small Town, Moderate to High Median Income</td>
<td>Medium</td>
<td>9</td>
</tr>
<tr>
<td>Urban, Low Median Income</td>
<td>Low</td>
<td>13</td>
</tr>
<tr>
<td>Major Urban/Very High Poverty</td>
<td>Low</td>
<td>7</td>
</tr>
<tr>
<td>Urban/Suburban, High Median Income</td>
<td>High</td>
<td>30</td>
</tr>
</tbody>
</table>

*p=.003*, and Number of Students, $F(4, 130)=2.592, p=.040. Significant differences in Outcomes of Leadership were found only for Teaching Experience, $F(4, 132)=2.504, p=.045$. Tables 10, 11, and 12 present the results of these analyses. These results were used to identify covariates in the analyses for RQ3, to control for their effects.

Table 10

*ANOVA Summary Table for Demographic Differences in Leader Effectiveness*

<table>
<thead>
<tr>
<th>Demographic Variable</th>
<th>F</th>
<th>p</th>
<th>Partial $\eta^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participant Sex</td>
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<tr>
<td>Participant Education</td>
<td>.106</td>
<td>.899</td>
<td>.002</td>
</tr>
<tr>
<td>Participant Race</td>
<td>.800</td>
<td>.373</td>
<td>.006</td>
</tr>
<tr>
<td>Teaching Experience</td>
<td>2.718</td>
<td>.032*</td>
<td>.076</td>
</tr>
<tr>
<td>Principal Sex</td>
<td>.327</td>
<td>.569</td>
<td>.002</td>
</tr>
<tr>
<td>Principal Education</td>
<td>.003</td>
<td>.997</td>
<td>.000</td>
</tr>
<tr>
<td>Principal Race</td>
<td>2.526</td>
<td>.114</td>
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<tr>
<td>Principal Experience</td>
<td>.404</td>
<td>.806</td>
<td>.015</td>
</tr>
<tr>
<td>Years Worked Together</td>
<td>.509</td>
<td>.676</td>
<td>.011</td>
</tr>
<tr>
<td>District Typology/Income</td>
<td>2.376</td>
<td>.098</td>
<td>.045</td>
</tr>
<tr>
<td>Report Card Grade</td>
<td>3.452</td>
<td>.011*</td>
<td>.114</td>
</tr>
<tr>
<td>Number Supervised</td>
<td>2.005</td>
<td>.097</td>
<td>.058</td>
</tr>
<tr>
<td>Number of Students</td>
<td>2.369</td>
<td>.056</td>
<td>.068</td>
</tr>
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</table>

*Note: *$p\leq0.05$*
Table 11

ANOVA Summary Table for Demographic Differences in Transformational Leadership

<table>
<thead>
<tr>
<th>Demographic Variable</th>
<th>$F$</th>
<th>$p$</th>
<th>Partial $\eta^2$</th>
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</thead>
<tbody>
<tr>
<td>Participant Sex</td>
<td>.190</td>
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<tr>
<td>Participant Education</td>
<td>.133</td>
<td>.876</td>
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<tr>
<td>Participant Race</td>
<td>.757</td>
<td>.386</td>
<td>.006</td>
</tr>
<tr>
<td>Teaching Experience</td>
<td>2.666</td>
<td>.035*</td>
<td>.075</td>
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<tr>
<td>Principal Sex</td>
<td>.387</td>
<td>.535</td>
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<tr>
<td>Principal Education</td>
<td>.018</td>
<td>.982</td>
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<td>Principal Race</td>
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<td>.026</td>
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<td>Principal Experience</td>
<td>.306</td>
<td>.874</td>
<td>.011</td>
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<td>Years Worked Together</td>
<td>.573</td>
<td>.634</td>
<td>.013</td>
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<td>District Typology/Income</td>
<td>2.638</td>
<td>.076</td>
<td>.050</td>
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<td>Report Card Grade</td>
<td>4.208</td>
<td>.003**</td>
<td>.136</td>
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<td>Number Supervised</td>
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<td>.065</td>
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<tr>
<td>Number of Students</td>
<td>2.592</td>
<td>.040*</td>
<td>.074</td>
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</table>

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

Table 12

ANOVA Summary Table for Demographic Differences in Outcomes of Leadership

<table>
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<tr>
<th>Demographic Variable</th>
<th>$F$</th>
<th>$p$</th>
<th>Partial $\eta^2$</th>
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<td>Participant Sex</td>
<td>.095</td>
<td>.759</td>
<td>.001</td>
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<tr>
<td>Participant Education</td>
<td>.088</td>
<td>.916</td>
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<td>Participant Race</td>
<td>.771</td>
<td>.382</td>
<td>.006</td>
</tr>
<tr>
<td>Teaching Experience</td>
<td>2.504</td>
<td>.045*</td>
<td>.071</td>
</tr>
<tr>
<td>Principal Sex</td>
<td>.194</td>
<td>.660</td>
<td>.001</td>
</tr>
<tr>
<td>Principal Education</td>
<td>.027</td>
<td>.973</td>
<td>.000</td>
</tr>
<tr>
<td>Principal Race</td>
<td>.848</td>
<td>.359</td>
<td>.006</td>
</tr>
<tr>
<td>Principal Experience</td>
<td>.649</td>
<td>.629</td>
<td>.024</td>
</tr>
<tr>
<td>Years Worked Together</td>
<td>.368</td>
<td>.776</td>
<td>.008</td>
</tr>
<tr>
<td>District Typology/Income</td>
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<td>.187</td>
<td>.033</td>
</tr>
<tr>
<td>Report Card Grade</td>
<td>1.958</td>
<td>.106</td>
<td>.068</td>
</tr>
<tr>
<td>Number Supervised</td>
<td>1.471</td>
<td>.215</td>
<td>.043</td>
</tr>
<tr>
<td>Number of Students</td>
<td>1.733</td>
<td>.147</td>
<td>.051</td>
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</table>

*Note: *p* ≤ .05

Further analysis of these differences using Tukey’s post hoc tests revealed that Leader Effectiveness and Transformational Leadership ratings were significantly lower among teachers...
from schools graded as Effective than among teachers from schools graded Excellent or Excellent with Distinction. Leader Effectiveness, Transformational Leadership, and Outcomes of Leadership ratings were significantly lower among teachers with 0-2 years of Teaching Experience than among those with 3-5 years of Teaching Experience. In addition, Transformational Leadership ratings were significantly lower among teachers from schools with 200-299 students than among teachers from schools with 300-399 students.

The final two series of ANOVAs were conducted to assess demographic differences in Confidence and Humility. Tables 13 and 14 present the results of these analyses. Significant differences in Confidence were found for participant Teaching Experience, $F(4, 132)=3.209$, $p=.015$), school Report Card Grade $F(4, 107)=2.976$, $p=.022$, and Number of Students, $F(4, 130)=2.992$, $p=.021$. Significant differences in Humility were found only for Teaching Experience, $F(4, 132)=2.709$, $p=.033$.

Table 13

*ANOVA Summary Table for Demographic Differences in Confidence*

<table>
<thead>
<tr>
<th>Demographic Variable</th>
<th>$F$</th>
<th>$p$</th>
<th>Partial $\eta^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participant Sex</td>
<td>.393</td>
<td>.532</td>
<td>.003</td>
</tr>
<tr>
<td>Participant Education</td>
<td>.136</td>
<td>.873</td>
<td>.002</td>
</tr>
<tr>
<td>Participant Race</td>
<td>.018</td>
<td>.892</td>
<td>.000</td>
</tr>
<tr>
<td>Teaching Experience</td>
<td>3.209</td>
<td>.015*</td>
<td>.089</td>
</tr>
<tr>
<td>Principal Sex</td>
<td>1.002</td>
<td>.319</td>
<td>.007</td>
</tr>
<tr>
<td>Principal Education</td>
<td>.186</td>
<td>.830</td>
<td>.003</td>
</tr>
<tr>
<td>Principal Race</td>
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<td>.011</td>
</tr>
<tr>
<td>Principal Experience</td>
<td>1.314</td>
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<td>Years Worked Together</td>
<td>1.099</td>
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<td>District Typology/Income</td>
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<td>.481</td>
<td>.014</td>
</tr>
<tr>
<td>Report Card Grade</td>
<td>2.976</td>
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<td>.100</td>
</tr>
<tr>
<td>Number Supervised</td>
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<td>.054</td>
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<tr>
<td>Number of Students</td>
<td>2.992</td>
<td>.021*</td>
<td>.084</td>
</tr>
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</table>

*Note: *$p<.05$
Further analysis of these differences using Tukey’s post hoc tests revealed that
Confidence ratings and Humility ratings were significantly lower among teachers with 0-2 years
of Teaching Experience than among those with 3-5 years of experience. Confidence ratings
were also significantly lower among teachers from schools graded as Effective than among those
from schools graded as Excellent with Distinction. In addition, Confidence ratings among
teachers from schools with 200-299 students were significantly lower than among those from
schools with 300-399 students.

**Exploration of interaction.** To further examine the demographic differences found on
Confidence, an exploratory ANOVA was conducted to test for possible interactions between
Teaching Experience, Report Card Grade and Number of Students on Confidence. Results of
this analysis revealed a significant interaction between Report Card Grade and Teaching
Experience, $F(11, 59)=3.180, p=.002$. This interaction indicates that these demographic
variables were working together rather than separately to impact leader Confidence.

---

Table 14

*ANOVA Summary Table for Demographic Differences in Humility*

<table>
<thead>
<tr>
<th>Demographic Variable</th>
<th>$F$</th>
<th>$p$</th>
<th>Partial $\eta^2$</th>
</tr>
</thead>
<tbody>
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<td>.988</td>
<td>.000</td>
</tr>
<tr>
<td>Participant Education</td>
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<td>.930</td>
<td>.001</td>
</tr>
<tr>
<td>Participant Race</td>
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<td>.496</td>
<td>.003</td>
</tr>
<tr>
<td>Teaching Experience</td>
<td>2.709</td>
<td>.033*</td>
<td>.076</td>
</tr>
<tr>
<td>Principal Sex</td>
<td>.169</td>
<td>.682</td>
<td>.001</td>
</tr>
<tr>
<td>Principal Education</td>
<td>.013</td>
<td>.987</td>
<td>.000</td>
</tr>
<tr>
<td>Principal Race</td>
<td>.440</td>
<td>.508</td>
<td>.003</td>
</tr>
<tr>
<td>Principal Experience</td>
<td>.906</td>
<td>.464</td>
<td>.033</td>
</tr>
<tr>
<td>Years Worked Together</td>
<td>.371</td>
<td>.774</td>
<td>.008</td>
</tr>
<tr>
<td>District Typology/Income</td>
<td>2.066</td>
<td>.132</td>
<td>.039</td>
</tr>
<tr>
<td>Report Card Grade</td>
<td>1.998</td>
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<td>.070</td>
</tr>
<tr>
<td>Number Supervised</td>
<td>.672</td>
<td>.612</td>
<td>.020</td>
</tr>
<tr>
<td>Number of Students</td>
<td>2.351</td>
<td>.058</td>
<td>.067</td>
</tr>
</tbody>
</table>

* Note: *$p<.05$
Research Question 3: Mean Differences for Leader Effectiveness and Its Subscales by Confidence Level and Humility Level

Research Question 3 examined if Leader Effectiveness differs by the level of leader Confidence and Humility, while controlling for relevant demographic variables. Demographic variables for which significant differences were identified in RQ2 were used as covariates in these analyses. This question was further broken into three parts: (a) Are there significant mean differences for Leader Effectiveness by leader Confidence level?; (b) Are there significant mean differences for Leader Effectiveness by leader Humility level?; and (c) Is there a significant interaction on Leader Effectiveness between leader Confidence and Humility? To address these questions, it was necessary to create two new variables in which data for both Confidence and Humility were divided into categories of Low, Medium, and High. For both variables, mean scores of 0 to 2.99 were categorized as Low; mean scores of 3 to 4 were categorized as Medium; mean scores of 4 to 5 were categorized as High. Furthermore, for each part of RQ3 (3a, 3b, and 3c), three separate analyses were conducted: the first with Leader Effectiveness as the dependent variable, the second with Transformational Leadership as the dependent variable, and the third with Outcomes of Leadership as the dependent variable (the latter two being subscales of Leader Effectiveness).

Analysis of Leader Effectiveness and its subscales by Confidence level (RQ3a) and by Humility level (RQ3b). Because the steps taken for the analyses of RQ3a and RQ3b were the same, the analyses for both will be reported in this section. For both RQ3a and RQ3b, three Univariate ANCOVAs were conducted, each with a different dependent variable: Leader Effectiveness, Transformational Leadership, and Outcomes of Leadership. Categorical
Confidence was the independent variable in the ANCOVAs for RQ3a; categorical Humility was the independent variable in the ANCOVAs for RQ3b.

The first step in each of these ANCOVAs tested for interactions between the independent variable and the covariate(s) as well as interactions between the covariates. Based on the results for RQ2, Teaching Experience and Report Card Grade were entered as covariates for the analyses of Leader Effectiveness; Teaching Experience, Report Card Grade, and Numbers of students were entered as covariates for the analyses of Transformational Leadership; Teaching Experience was entered as a covariate for the analyses of Outcomes of Leadership. This step revealed no significant interactions between Confidence and the covariates or between Humility and the covariates. However, a significant interaction between Report Card Grade and Teaching Experience was found, indicating that these two variables were working together rather than separately to affect Leader Effectiveness and Transformational Leadership, in the analyses of Confidence and of Humility. The interaction prevents the interpretation of main effects of either Report Card Grade or Teaching Experience on Leader Effectiveness and on Transformational Leadership.

To complete the second (and final) step of these ANCOVAs, an interaction variable (Report Card Grade X Teaching Experience) was created, by first computing a new Report Card Grade variable (equal to the original Report Card Grade scores minus the Report Card Grade mean), then computing a new Teaching Experience variable (equal to the original Teaching Experience scores minus the Teaching Experience mean). The two new “centered” variables were then multiplied together to compute the interaction variable. Report Card Grade X Teaching Experience was then entered as a covariate in the second step of the analyses of Leader Effectiveness and Transformational Leadership, while Report Card Grade and Teaching
Experience as individual variables were removed as covariates in those analyses. Similar results were found for both Confidence and Humility, as reported next.

**Leader Effectiveness.** Results showed that Confidence had a main effect on Leader Effectiveness, $F(2, 108)=42.757$, $p<.001$, partial $\eta^2=.442$, with Leader Effectiveness being lowest for Low Confidence and highest for High Confidence, while controlling for Report Card Grade X Teaching Experience. In addition, the interaction of Report Card Grade X Teaching Experience significantly adjusted the means, $F(1, 108)=9.571$, $p=.047$, partial $\eta^2=.081$.

Humility also had a main effect on Leader Effectiveness, $F(2, 105)=52.576$, $p<.001$, partial $\eta^2=.493$, with Leader Effectiveness being lowest for Low Humility and highest for High Humility, while controlling for Report Card Grade X Teaching Experience. Again, the interaction of Report Card Grade X Teaching Experience significantly adjusted the means, $F(1, 108)=6.888$, $p=.010$, partial $\eta^2=.060$.

**Transformational Leadership.** Results revealed that Confidence had a main effect on Transformational Leadership, $F(2, 105)=42.926$, $p<.001$, partial $\eta^2=.450$. Transformational Leadership was lowest for Low Confidence and highest for High Confidence, while controlling for Report Card Grade X Teaching Experience and Number of Students. Number of Students did not significantly adjust the means, but the interaction of Report Card Grade X Teaching Experience did significantly adjust the means, $F(1, 105)=8.271$, $p=.005$, partial $\eta^2=.073$.

Humility also had a main effect on Transformational Leadership, $F(2, 105)=48.644$, $p<.001$, partial $\eta^2=.481$, with Transformational Leadership being lowest for Low Humility and highest for High Humility, while controlling for Report Card Grade X Teaching Experience and Number of Students. The Number of Students did not significantly adjust the means. However,
Report Card Grade X Teaching Experience did significantly adjust the means, $F(1, 105)=5.367$, $p=.022$, partial $\eta^2=.049$.

**Outcomes of Leadership.** Results indicated that Confidence had a main effect on Outcomes of Leadership, $F(2, 133)=35.498$, $p<.001$, partial $\eta^2=.348$. Humility also had a main effect on Outcomes of Leadership, $F(2, 133)=56.542$, $p<.001$, partial $\eta^2=.460$. Outcomes of Leadership were lowest for Low Confidence and for Low Humility and highest for High Confidence and for High Humility, while controlling for Teaching Experience. However, Teaching Experience did not significantly adjust the means of either Confidence or Humility.

Table 15 presents the original and adjusted group means of Leader Effectiveness, Transformational Leadership and Outcomes of Leadership by Confidence level. Table 16 presents the original and adjusted group means of Leader Effectiveness, Transformational Leadership and Outcomes of Leadership by Humility level.

Table 15

<table>
<thead>
<tr>
<th></th>
<th>Low Confidence</th>
<th>Med Confidence</th>
<th>High Confidence</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>n</strong></td>
<td><strong>n</strong></td>
<td><strong>n</strong></td>
<td><strong>n</strong></td>
</tr>
<tr>
<td><strong>Leader Effectiveness</strong></td>
<td>21  2.39  2.43</td>
<td>56  3.20  3.17</td>
<td>35  4.09  4.12</td>
</tr>
<tr>
<td><strong>Transformational Leadership</strong></td>
<td>21  2.38  2.43</td>
<td>56  3.14  3.10</td>
<td>33  4.04  4.08</td>
</tr>
<tr>
<td><strong>Outcomes of Leadership</strong></td>
<td>30  2.45  2.45</td>
<td>65  3.31  3.30</td>
<td>42  4.16  4.17</td>
</tr>
</tbody>
</table>
Table 16

*Original and Adjusted Group Means by Level of Humility*

<table>
<thead>
<tr>
<th></th>
<th>Low Humility</th>
<th>Medium Humility</th>
<th>High Humility</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>Orig</td>
<td>Adj</td>
</tr>
<tr>
<td>Leader Effectiveness</td>
<td>26</td>
<td>2.33</td>
<td>2.38</td>
</tr>
<tr>
<td>Transformational Leadership</td>
<td>26</td>
<td>2.34</td>
<td>2.37</td>
</tr>
<tr>
<td>Outcomes of Leadership</td>
<td>37</td>
<td>2.36</td>
<td>2.37</td>
</tr>
</tbody>
</table>

*Analysis of Report Card Grade X Teaching Experience interaction.* As reported above, a significant interaction between Report Card Grade and Teaching Experience was found on both Leader Effectiveness and Transformational Leadership (as well as on Confidence). To further explore how these two variables were working together, mean Leader Effectiveness scores were examined across Report Card Grade categories and levels of Teaching Experience, as were mean Transformational Leadership scores. Line charts were also created to examine this interaction, as presented in Figures 3 and 4. Examination of the mean scores and line charts revealed no consistent patterns in Report Card Grade or Teaching Experience, either separately or in their interaction, on Leader Effectiveness or Transformational Leadership. Because no consistent patterns were found, it was not possible to determine the reason for the Report Card Grade X Teaching Experience interaction. The examination of this interaction did, however, support the use of the interaction variable created and used for the analyses of Leader Effectiveness and Transformational Leadership.
Figure 3. Line Chart of Interaction Between Report Card Grade and Teaching Experience on Leader Effectiveness.

![Line Chart of Leader Effectiveness](image)

Figure 4. Line Chart of Interaction Between Report Card Grade and Teaching Experience on Transformational Leadership.

![Line Chart of Transformational Leadership](image)
Analysis of Leader Effectiveness and its subscales by Confidence and Humility (RQ3c). For the analysis of question 3c, three Factorial ANOVAs were conducted, the first with Leader Effectiveness as the dependent variable, the second with Transformational Leadership as the dependent variable, and the third with Outcomes of Leadership as the dependent variable. In each analysis, categorical Confidence and categorical Humility were entered as independent variables. Because Report Card Grade X Teaching Experience significantly adjusted the means for Leader Effectiveness and Transformational Leadership in the analyses for RQ3a and RQ3b, this interaction variable was entered as a covariate in the analyses of Leader Effectiveness and Transformational Leadership for RQ3c. No covariates were entered in the analysis of Outcomes of Leadership for RQ3c, because Teaching Experience did not significantly adjust the means of Outcomes of Leadership in the analyses of RQ3a and RQ3b.

Preliminary analyses to examine factor interaction revealed a significant interaction between Confidence and Humility for all three dependent variables. Therefore no further analysis of main effects was conducted. However, the interaction between Confidence and Humility and the effects of this interaction were explored.

**Interaction between Confidence and Humility on Leader Effectiveness.** To investigate the interaction between Confidence and Humility in relation to Leader Effectiveness, mean Leadership Effectiveness scores were compared for Low, Medium, and High levels of Confidence and Humility. Table 17 presents the mean Leader Effectiveness scores for each group. Additionally, a line chart was created as provided in Figure 5.
Table 17

*Mean Scores for Leader Effectiveness by Levels of Confidence and Humility*

<table>
<thead>
<tr>
<th></th>
<th>Low Confidence</th>
<th>Med Confidence</th>
<th>High Confidence</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>Mean</td>
<td>n</td>
</tr>
<tr>
<td>Low Humility</td>
<td>14</td>
<td>2.39</td>
<td>10</td>
</tr>
<tr>
<td>Medium Humility</td>
<td>7</td>
<td>2.39</td>
<td>31</td>
</tr>
<tr>
<td>High Humility</td>
<td>0</td>
<td>--</td>
<td>15</td>
</tr>
</tbody>
</table>

*Figure 5.* Line Chart of Interaction Between Confidence and Humility on Leader Effectiveness.

A review of the line chart and the mean scores of High, Medium and Low groups for Confidence and Humility revealed that within the Medium and High Humility groups, Leader Effectiveness increased with increasing levels of Confidence. Similarly, within the Medium and High Confidence groups, Leader Effectiveness increased with increasing levels of Humility. Within the Low Humility group, however, Leader Effectiveness decreased with increasing levels
of Confidence. Within the Low Confidence group, Leader Effectiveness remained the same as Humility increased from Low to Medium. In general, Leader Effectiveness was lowest for the Low Humility group (regardless of Confidence level). The highest level of Leader Effectiveness was found in the High Humility-High Confidence group, whereas the lowest level was found in the Low Humility-High Confidence group. Interestingly, within the High Humility group, no cases were categorized as having Low Confidence.

**Interaction between Confidence and Humility on Transformational Leadership.** To investigate the interaction between Confidence and Humility in relation to Transformational Leadership, mean Transformational Leadership scores were compared for Low, Medium, and High levels of Confidence and Humility. Table 18 presents the mean Transformational Leadership scores for each group. Additionally, a line chart was created as provided in Figure 6.

Table 18

<table>
<thead>
<tr>
<th></th>
<th>Low Confidence</th>
<th>Med Confidence</th>
<th>High Confidence</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>Mean</td>
<td>n</td>
</tr>
<tr>
<td>Low Humility</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>2.38</td>
<td>10</td>
<td>2.32</td>
</tr>
<tr>
<td>Medium Humility</td>
<td>7</td>
<td>2.40</td>
<td>31</td>
</tr>
<tr>
<td>High Humility</td>
<td>0</td>
<td>--</td>
<td>15</td>
</tr>
</tbody>
</table>
A similar pattern of means was found for Transformational Leadership as was found for Leader Effectiveness. Within the Medium and High Humility groups, Transformational Leadership increased with increasing levels of Confidence. Similarly, within the Medium and High Confidence groups, Transformational Leadership increased with increasing levels of Humility. Within the Low Humility group, however, Transformational Leadership decreased with increasing levels of Confidence. Within the Low Confidence group, Transformational Leadership remained nearly the same as Humility increased from Low to Medium. In general, Transformational Leadership was lowest for the Low Humility group (regardless of Confidence level). The highest level of Transformational Leadership was found in the High Humility-High Confidence group, whereas the lowest level was found in the Low Humility-High Confidence group. Interestingly, within the High Humility group, no cases were categorized as having Low Confidence.
**Interaction between Confidence and Humility on Outcomes of Leadership.** Finally, to investigate the interaction between Confidence and Humility in relation to Outcomes of Leadership, the mean Outcomes of Leadership scores were compared for Low, Medium, and High levels of Confidence and Humility. Table 19 presents the mean Outcomes of Leadership scores for each group. Additionally, a line chart was created as provided in Figure 7.

**Table 19**

*Mean Scores for Outcomes of Leadership by Levels of Confidence and Humility*

<table>
<thead>
<tr>
<th></th>
<th>Low Confidence</th>
<th></th>
<th>Med Confidence</th>
<th></th>
<th>High Confidence</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>Mean</td>
<td>n</td>
<td>Mean</td>
<td>n</td>
<td>Mean</td>
</tr>
<tr>
<td>Low Humility</td>
<td>21</td>
<td>2.50</td>
<td>13</td>
<td>2.19</td>
<td>3</td>
<td>2.19</td>
</tr>
<tr>
<td>Medium Humility</td>
<td>9</td>
<td>2.33</td>
<td>34</td>
<td>3.48</td>
<td>8</td>
<td>4.01</td>
</tr>
<tr>
<td>High Humility</td>
<td>0</td>
<td>--</td>
<td>18</td>
<td>3.81</td>
<td>31</td>
<td>4.39</td>
</tr>
</tbody>
</table>

The pattern of means for Outcomes of Leadership was similar to the patterns for Leader Effectiveness and Transformational Leadership, with one notable difference. Within the Low Confidence group, Outcomes of Leadership noticeably declined as Humility increased from Low to Medium.
Research Question 4: Primary Variable Predictions of Leader Effectiveness

To address RQ4 (Do leader confidence and humility significantly predict Leader Effectiveness?) three multiple standard regression analyses (using the Enter method) were conducted, the first with Leader Effectiveness as the dependent variable, the second with Transformational Leadership as the dependent variable, and the third with Outcomes of Leadership as the dependent variable. As discussed earlier, multivariate outliers were eliminated for purposes of these analyses. Tolerance statistics for each regression indicated that collinearity was not present.

Regression results indicated that the overall model of Confidence and Humility significantly predicted Leader Effectiveness, $R^2=.607$, $R^2_{adj}=.601$, $F(2, 130)=100.401$, $p<.001$. This model accounts for 60.7% of the variance in Leader Effectiveness, and both Humility and Confidence significantly contributed to the model. The overall model of Confidence and
Humility also significantly predicted Transformational Leadership, $R^2=.559$, $R^2_{adj}=.552$, $F(2, 131)=82.912$, $p<.001$, and Outcomes of Leadership, $R^2=.538$, $R^2_{adj}=.531$, $F(2, 130)=75.844$, $p<.001$. The model predicts 55.9% of the variance in Transformational Leadership and 53.8% of the variance in Outcomes of Leadership, and both Humility and Confidence significantly contributed to the model in both cases. Tables 20, 21, and 22 report the Regression Coefficients for these analyses.

Table 20

Regression Coefficients for Confidence and Humility Predicting Leader Effectiveness

<table>
<thead>
<tr>
<th></th>
<th>$B$</th>
<th>$\beta$</th>
<th>$t$</th>
<th>Bivariate $r$</th>
<th>Partial $r$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humility</td>
<td>.413</td>
<td>.410</td>
<td>4.679*</td>
<td>.734</td>
<td>.380</td>
</tr>
<tr>
<td>Confidence</td>
<td>.483</td>
<td>.416</td>
<td>4.751*</td>
<td>.735</td>
<td>.385</td>
</tr>
</tbody>
</table>

Note: $n=133$; *$p<.001$

Table 21

Regression Coefficients for Confidence and Humility Predicting Transformational Leadership

<table>
<thead>
<tr>
<th></th>
<th>$B$</th>
<th>$\beta$</th>
<th>$t$</th>
<th>Bivariate $r$</th>
<th>Partial $r$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humility</td>
<td>.392</td>
<td>.401</td>
<td>4.296*</td>
<td>.707</td>
<td>.351</td>
</tr>
<tr>
<td>Confidence</td>
<td>.434</td>
<td>.391</td>
<td>4.187*</td>
<td>.705</td>
<td>.344</td>
</tr>
</tbody>
</table>

Note: $n=134$, *$p<.001$

Table 22

Regression Coefficients for Confidence and Humility Predicting Outcomes of Leadership

<table>
<thead>
<tr>
<th></th>
<th>$B$</th>
<th>$\beta$</th>
<th>$t$</th>
<th>Bivariate $r$</th>
<th>Partial $r$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humility</td>
<td>.489</td>
<td>.428</td>
<td>4.507*</td>
<td>.700</td>
<td>.368</td>
</tr>
<tr>
<td>Confidence</td>
<td>.460</td>
<td>.350</td>
<td>3.684*</td>
<td>.683</td>
<td>.307</td>
</tr>
</tbody>
</table>

Note: $n=133$, *$p<.001$
Research Question 4a: Primary Variable Subscale Predictions of Leader Effectiveness

To explore RQ4a, three additional multiple regression analyses were conducted, this time using the Forward method, to identify which Humility subscales and which Confidence subscales best predict Leader Effectiveness, Transformational Leadership, and Outcomes of Leadership. In each of these analyses, Teachability, Appreciation, and Self-Awareness (Humility subscales) and Leader Efficacy and Task Confidence (Confidence subscales) were entered as independent variables. Tolerance statistics for each regression indicated that no collinearity was present.

Regression results indicated that Appreciation, Task Confidence and Self-Awareness significantly predicted both Leader Effectiveness, $R^2 = .603, R^2_{adj} = .594, F(3, 129) = 65.414, p < .001$ and Transformational Leadership, $R^2 = .569, R^2_{adj} = .559, F(3, 130) = 57.228, p < .001$. Thus, of the five subscales entered, only three variables (Appreciation, Task Confidence and Self-Awareness) significantly contributed to Leader Effectiveness and to Transformational Leadership, accounting for 60.3% of the variance in Leader Effectiveness and 56.9% of the variance in Transformational Leadership. A slightly different pattern of results was found for Outcomes of Leadership. Here, Appreciation, Leader Efficacy, and Self-Awareness significantly predicted Outcomes of Leadership, $R^2 = .539, R^2_{adj} = .528, F(3, 129) = 50.178, p < .001$. These three subscales accounted for 53.9% of the variance in Outcomes of Leadership. Tables 23, 24, and 25 report Regression Coefficients for these analyses.

In summary, the Humility subscales of Appreciation and Self-Awareness were significant predictors of Leader Effectiveness and both of its subscales. Task Confidence significantly predicted Leader Effectiveness and Transformational Leadership, while Leader Efficacy was a unique predictor of Outcomes of Leadership.
Table 23

*Regression Coefficients for Confidence and Humility Subscales (Leader Efficacy, Task Confidence, Teachability, Appreciation, Self-Awareness) Predicting Leader Effectiveness*

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>β</th>
<th>t</th>
<th>Bivariate r</th>
<th>Partial r</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appreciation</td>
<td>.299</td>
<td>.331</td>
<td>3.642**</td>
<td>.708</td>
<td>.305</td>
</tr>
<tr>
<td>Task Confidence</td>
<td>.351</td>
<td>.321</td>
<td>3.975**</td>
<td>.690</td>
<td>.330</td>
</tr>
<tr>
<td>Self-Awareness</td>
<td>.214</td>
<td>.213</td>
<td>2.241*</td>
<td>.694</td>
<td>.194</td>
</tr>
</tbody>
</table>

*Note: n=133, *p<.05; **p<.001

Table 24

*Regression Coefficients for Confidence and Humility Subscales (Leader Efficacy, Task Confidence, Teachability, Appreciation, and Self-Awareness) Predicting Transformational Leadership*

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>β</th>
<th>t</th>
<th>Bivariate r</th>
<th>Partial r</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appreciation</td>
<td>.290</td>
<td>.329</td>
<td>3.477**</td>
<td>.690</td>
<td>.292</td>
</tr>
<tr>
<td>Task Confidence</td>
<td>.319</td>
<td>.306</td>
<td>3.650**</td>
<td>.668</td>
<td>.305</td>
</tr>
<tr>
<td>Self-Awareness</td>
<td>.200</td>
<td>.205</td>
<td>2.065*</td>
<td>.674</td>
<td>.178</td>
</tr>
</tbody>
</table>

*Note: n=134, *p<.05; **p<.001

Table 25

*Regression Coefficients for Confidence and Humility Subscales (Leader Efficacy, Task Confidence, Teachability, Appreciation, and Self-Awareness) Predicting Outcomes of Leadership*

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>β</th>
<th>t</th>
<th>Bivariate r</th>
<th>Partial r</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appreciation</td>
<td>.278</td>
<td>.271</td>
<td>2.626**</td>
<td>.674</td>
<td>.225</td>
</tr>
<tr>
<td>Leader Efficacy</td>
<td>.375</td>
<td>.302</td>
<td>3.119**</td>
<td>.673</td>
<td>.265</td>
</tr>
<tr>
<td>Self-Awareness</td>
<td>.262</td>
<td>.230</td>
<td>2.263*</td>
<td>.662</td>
<td>.195</td>
</tr>
</tbody>
</table>

*Note: n=133, *p<.05; **p<.01*
To examine possible reasons for these findings, correlations between Leader Effectiveness, Transformational Leadership, and Outcomes of Leadership with the three subscales of Humility and the two subscales of Confidence were compared, as reported in Table 8 (above). Teachability, Self-Awareness, and Appreciation were significantly and positively correlated with Leader Effectiveness and both of its subscales—with Self-Awareness and Appreciation having slightly stronger relationships with these variables than Teachability. Of the two Confidence subscales, Leader Efficacy had the strongest relationship with Leader Effectiveness and Outcomes of Leadership; Leader Efficacy and Task Confidence had equally strong relationships with Transformational Leadership.

Taken together, these correlations appear to provide only a partial basis for understanding why Teachability failed to predict Leader Effectiveness and its subscales, and why Task Confidence predicted Leader Effectiveness and Transformational Leadership while Leader Efficacy predicted Outcomes of Leadership. Based on the calculations involved in Forward Regression, the subscales identified as predictors in the analyses of RQ4a represent those that had the highest correlations with the respective dependent variables and which accounted for the most unique variance.

**Research Question 5: Primary and Demographic Variable Predictions of Leader Effectiveness**

To address RQ5 (Which of the study’s variables significantly predict Leader Effectiveness?), three final multiple regression analyses were conducted using the Forward method, with a different dependent variable for each: Leader Effectiveness, Transformational Leadership, and Outcomes of Leadership. Multivariate outliers were again eliminated for purposes of these analyses. In each analysis, Confidence, Humility, and all demographic
variables (Participant Sex, Education, Race, Teaching Experience; Principal Sex, Education, Race, and Experience; Years Worked Together; District Typology, Report Card Grade, Number Supervised and Number of Students) were entered as independent variables. The recoded versions of Participant Race (Caucasian, Other), Principal Race (Caucasian, Other) and District Typology/Income (Low, Medium, High) were used for these analyses. Tolerance statistics for each regression indicated that no collinearity was present.

Results of the first two regressions generated significant models with the same three variables, indicating that Humility, District Typology/Income, and Confidence significantly predicted both Leader Effectiveness, $R^2=.594$, $R^2_{adj}=.576$, $F(3, 67)=32.669, p<.001$ and Transformational Leadership, $R^2=.591$, $R^2_{adj}=.573$, $F(3, 67)=32.299, p<.001$. These three variables accounted for 59.4% of the variance in Leader Effectiveness and 59.1% of the variance in Transformational Leadership. The third regression also generated a significant model. However, only Humility and District Typology/Income significantly predicted Outcomes of Leadership, $R^2=.489$, $R^2_{adj}=.474$, $F(2, 68)=32.574, p<.001$. These two variables accounted for 48.9% of the variance in Outcomes of Leadership. Interestingly, Confidence did not significantly contribute to this model. Moreover, of the thirteen demographic variables entered, only District Typology/Income significantly contributed to Leader Effectiveness and its subscales—none of the demographic variables for which differences were found in RQ2 did so. Tables 26, 27, and 28 report the Regression Coefficients for these analyses.
Table 26

Regression Coefficients for Confidence, Humility and Demographic Variables Predicting Leader Effectiveness

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>β</th>
<th>t</th>
<th>Bivariate r</th>
<th>Partial r</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humility</td>
<td>.481</td>
<td>.488</td>
<td>3.741***</td>
<td>.713</td>
<td>.416</td>
</tr>
<tr>
<td>District Type/Income</td>
<td>.284</td>
<td>.234</td>
<td>2.976**</td>
<td>.123</td>
<td>.342</td>
</tr>
<tr>
<td>Confidence</td>
<td>.385</td>
<td>.320</td>
<td>2.457*</td>
<td>.679</td>
<td>.288</td>
</tr>
</tbody>
</table>

*Note: n=71, *p<.05; **p<.01; ***p<.001

Table 27

Regression Coefficients for Confidence, Humility and Demographic Variables Predicting Transformational Leadership

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>β</th>
<th>t</th>
<th>Bivariate r</th>
<th>Partial r</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humility</td>
<td>.435</td>
<td>.457</td>
<td>3.490**</td>
<td>.702</td>
<td>.392</td>
</tr>
<tr>
<td>District Type/Income</td>
<td>.288</td>
<td>.246</td>
<td>3.120*</td>
<td>.136</td>
<td>.356</td>
</tr>
<tr>
<td>Confidence</td>
<td>.404</td>
<td>.348</td>
<td>2.664*</td>
<td>.680</td>
<td>.309</td>
</tr>
</tbody>
</table>

*Note: n=71, *p<.01; **p<.001

Table 28

Regression Coefficients for Confidence, Humility and Demographic Variables Predicting Outcomes of Leadership

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>β</th>
<th>t</th>
<th>Bivariate r</th>
<th>Partial r</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humility</td>
<td>.808</td>
<td>.700</td>
<td>8.003**</td>
<td>.675</td>
<td>.696</td>
</tr>
<tr>
<td>District Type/Income</td>
<td>.264</td>
<td>.186</td>
<td>2.131*</td>
<td>.091</td>
<td>.250</td>
</tr>
</tbody>
</table>

*Note: n=71, *p<.05; **p<.001
Summary

To present the results of this study more concisely, this section presents a summary of results for each research question. Table 29 also presents a summary of key findings related to each research question.

RQ1 examined the relationship between Confidence, Humility, and Leader Effectiveness. Pearson r correlation coefficients indicated that strong positive relationships exist between each of these three variables and their subscales, with all correlation coefficients being significant at p<.001.

RQ2 examined demographic differences in Leader Effectiveness and its two subscales (Transformational Leadership and Outcomes of Leadership), as well as demographic differences in Confidence and Humility. All five variables (Leader Effectiveness, Transformational Leadership, Outcomes of Leadership, Confidence, and Humility) differed by Teaching Experience and in each case ratings were lower among teachers with 0-2 years of Teaching Experience than among those with 3-5 years of Teaching Experience. Three variables (Leader Effectiveness, Transformational Leadership, and Confidence) differed by Report Card Grade, and in each case ratings were lower among teachers from schools graded Effective than among those from schools graded Excellent with Distinction. In addition, ratings of Leader Effectiveness and Transformational Leadership were lower among teachers from schools graded Effective than among those from schools graded Excellent. Two variables (Transformational Leadership and Confidence) differed by Number of Students, and in both cases ratings were lower among teachers from schools with 200-299 students than among teachers from schools with 300-399 students. The results of these analyses were used to identify variables that would be entered as covariates in the analyses for RQ3.
RQ3a and RQ3b examined the possibility of main effects of categorical Confidence and categorical Humility, separately, on Leader Effectiveness and its subscales, while controlling for the effects of relevant demographic variables as indicated by RQ2. Results of these analyses revealed that both categorical Confidence and categorical Humility had main effects on Leader Effectiveness, Transformational Leadership and Outcomes of Leadership. In addition, Report Card Grade and Teaching Experience worked together rather than separately to affect Leader Effectiveness and Transformational Leadership. Unfortunately, no plausible explanation could be found for the Report Card Grade X Teaching Experience interaction. Also, Number of Students did not significantly adjust the means for Transformational Leadership, and Teaching Experience did not significantly adjust the means for Outcomes of Leadership, indicating the impact of these variables was negligible. Taken together, results indicate that Report Card Grade, Teaching Experience, and Number of Students in and of themselves had a negligible impact on the study’s primary variables. Perhaps a larger sample size would have brought clarity to the impact of these demographic variables on Leader Effectiveness and its subscales.

RQ3c then examined the possibility of main effects of categorical Confidence and categorical Humility, in combination, on Leader Effectiveness and its subscales while controlling for the effects of Report Card Grade X Teaching Experience, as indicated by the results of the analyses for RQ3a and RQ3b. In each of these analyses, a significant interaction between categorical Confidence and categorical Humility was revealed; therefore no further analysis of main effects was conducted. However, analysis of the Low, Medium, and High groups for Confidence and Humility with Leader Effectiveness and its subscales revealed some consistent and interesting patterns. Unless otherwise noted, the following results were found for Leader Effectiveness and both of its subscales (Transformational Leadership, and Outcomes of
Leadership). Within Medium and High Levels of Humility, Leader Effectiveness increased with increasing levels of Confidence. Similarly, within Medium and High Levels of Confidence, Leader Effectiveness increased with increasing levels of Humility. A different pattern of results was found, however, for Low Humility and Low Confidence. For Low Humility, Leader Effectiveness declined as Confidence increased. For Low Confidence, Leader Effectiveness and Transformational Leadership remained nearly the same as Humility increased from Low to Medium, while Outcomes of Leadership markedly decreased as Humility increased from Low to Medium. The highest levels of Leader Effectiveness were found for the High Confidence-High Humility group; the lowest levels of Leader Effectiveness were found for Low Humility-High Confidence group. Moreover, no cases were categorized as Low Confidence-High Humility.

RQ4 and RQ4a examined the ability of Humility and Confidence and their subscales to predict Leader Effectiveness and its subscales. Results of these analyses revealed that Humility and Confidence together significantly predicted Leader Effectiveness and both of its subscales, and that both Humility and Confidence significantly contributed to each model. Additionally, Appreciation and Self-Awareness (Humility subscales) and Task Confidence significantly predicted Leader Effectiveness and Transformational Leadership, while Appreciation, Self-Awareness and Leader Efficacy significantly predicted Outcomes of Leadership.

Finally, RQ5 examined the ability of Humility, Confidence, and all demographic variables to predict Leader Effectiveness and its subscales. Results of these analyses revealed Humility, District Typology (Income Level) and Confidence significantly predicted Leader Effectiveness and Transformational Leadership, while only Humility and District Typology (Income Level) significantly predicted Outcomes of Leadership.

Next, Chapter 5 will discuss the meaning, implications, and importance of these results.
Table 29

**Summary of Key Findings by Research Question**

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Key Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. What is the relationship between leader confidence, humility, and effectiveness?</td>
<td>• Confidence, Humility, Leader Effectiveness, Transformational Leadership, and Outcomes of Leadership were strongly and positively correlated</td>
</tr>
</tbody>
</table>
| 2. Do leader confidence, humility, and effectiveness differ by demographic variables | • Leader Effectiveness differed by Teaching Experience and Report Card Grade  
  • Transformational Leadership differed by Teaching Experience, Report Card Grade, and Number of Students  
  • Outcomes of Leadership differed by Teaching Experience  
  • Confidence differed by Teaching Experience, Report Card Grade, and Number of Students  
  • Humility differed by Teaching Experience |
| 3a. Are there significant differences for leader effectiveness by leader confidence level? | • Leader Effectiveness, Transformational Leadership, and Outcomes of Leadership significantly differed by level of Confidence.  
  • High levels of Leader Effectiveness and its subscales were associated with high levels of Confidence.  
  • Low levels of Leader Effectiveness and its subscales were associated with low levels of Confidence. |
| 3b. Are there significant differences for leader effectiveness by humility level? | • Leader Effectiveness, Transformational Leadership, and Outcomes of Leadership significantly differed by level of Humility.  
  • High levels of Leader Effectiveness and its subscales were associated with high levels of Humility.  
  • Low levels of Leader Effectiveness and its subscales were associated with low levels of Humility. |
| 3c. Is there a significant interaction on leader effectiveness between leader confidence and humility? | • Confidence and Humility significantly interacted with each other in their effects on Leader Effectiveness and its subscales. As Confidence increased in the low Humility level, Leader Effectiveness and its subscales decreased. Leader Effectiveness and its subscales were lowest for principals in the High Confidence-Low Humility category. No principals were rated as having Low Confidence-High Humility. |
| 4. Do leader confidence and humility significantly predict leader effectiveness? | • Confidence and Humility significantly predicted Leader Effectiveness, Transformational Leadership, and Outcomes of Leadership. |
| 4a. Which subscales of confidence and humility significantly predict leader effectiveness? | • Appreciation, Self-Awareness, and Task Confidence significantly predicted Leader Effectiveness and Transformational Leadership.  
  • Appreciation, Self-Awareness, and Leader Efficacy significantly predicted Outcomes of Leadership. |
| 5. Which of the study’s variables (including demographic variables) significantly predict leader effectiveness? | • Humility, Confidence, and School Typology/Income significantly predicted Leader Effectiveness and Transformational Leadership.  
  • Humility and School Typology/Income significantly predicted Outcomes of Leadership. |
CHAPTER 5: DISCUSSION, RECOMMENDATIONS AND CONCLUSION

“It’s what you learn after you know it all that counts.”

(John Wooden)

The purpose of this chapter is to summarize the purpose for and importance of the study, discuss the findings, review implications for leadership practice, recommend directions for future research, and draw conclusions. In accordance with this purpose, it is organized into five sections. The first section provides a summary review of the study and its significance for research and practice. The second section discusses the findings (statistical results) of this study in relation to previous studies, and includes an analysis and interpretation of these findings in consideration of the literature, as well as inferences drawn from the results. A review of the implications for leadership practice comprises the third section, including implications for reflective practice, for leadership development programs, and for leadership selection. The fourth section presents the study’s limitations and, in consideration of those limitations and the study’s findings, recommendations for future research. Conclusions are drawn in the fifth and final section.

Summary of the Study’s Purpose and Importance

This study was conducted to examine the relationship between follower perceptions of leader confidence, leader humility, and leader effectiveness. Whereas a large body of previous research exists providing empirical support to the notion that confidence is an essential attribute of effective leaders, researchers have only recently begun to assert the importance of humility as an attribute of effective leaders. Although a growing number of researchers have recently discussed the importance of humility for leader effectiveness, the literature provides little empirical support for such assertions. In fact, no quantitative studies have been conducted that
examine the relationship between the three primary variables of this study: leader confidence, humility, and effectiveness. Therefore, the present study makes a unique contribution to the literature by addressing this gap.

Findings from this study provide strong empirical support to the assertion that humility is necessary for effective leadership, and are consistent with previous studies finding that confidence is necessary for effective leadership. Moreover, this study provides an empirical basis for the assertion that leader humility is not incompatible with leader confidence. Findings from this study can assist current and prospective leaders as they strive to become more effective in their leadership roles. This study can also assist organizational decision-makers who are responsible for selecting candidates for positions of leadership, as well as those who are responsible for designing leadership development programs.

Discussion of Findings

This section will first discuss the findings of this study pertaining to humility and leader effectiveness, then those pertaining to confidence and leader effectiveness, and last those pertaining to confidence and humility and leader effectiveness. Unless otherwise noted, all references to Leader Effectiveness findings include its subscales of Transformational Leadership and Outcomes of Leadership.

Humility and leader effectiveness. This study is the first to provide quantitative evidence that humility is, indeed, strongly related to leader effectiveness, using direct measures of leader humility as perceived by followers. The findings lends empirical support to Collins’ (2001) qualitative findings that humility is an important attribute of effective (“Level 5”) leaders, and to propositions made by both practitioners and researchers regarding the importance of
humility for effective leadership (see, e.g., Covey, 1989; Kouzes & Posner, 2002; Morris et al., 2005; Reave, 2005; Schein et al., 2001; and Senge, 2005).

In support of assertions made in the literature, the present study found a strong positive correlation between leader Humility and Leader Effectiveness (RQ1). Moreover, this study found that high levels of Humility were associated with high levels of Leader Effectiveness, while low levels of Humility were associated with low levels of Leader Effectiveness (RQ3), and that Humility (as well as Confidence) significantly predicted Leader Effectiveness (RQ4). When demographic variables were entered into the analysis, Humility continued to significantly predict Leader Effectiveness (RQ5).

As noted in Chapter 2, some leadership analysts (e.g., Kelly, 2009; Lencioni, 1999; Machiavelli, 1513/1995), have been skeptical if not derisive of the value of humility in leadership, particularly in arena of politics. From the viewpoint of the detractors, humility is incompatible with successful leadership. Although those who subscribe to this view may admit that it is important for leaders to appear to be humble, they believe that genuine humility prevents leaders from being successful. They may argue that “nice guys finish last.” The findings of the present study, however, lend solid empirical support to assertions that humility is integral to effective leadership, thus weakening arguments against humility by Machiavellianists and other skeptics.

In the past decade, several studies have offered explanations for how humility contributes to leader effectiveness (Chang & Diddams, 2009; Lawrence, 2008; Morris et al., 2005; Nielsen et al., 2010; Reave, 2005; Sankar, 2003). Although a thorough theoretical analysis of the relationship between humility and leadership is beyond the scope of this discussion, brief attention to two of the primary bases for this relationship is in order.
One of the foremost possible explanations for the relationship between humility and leader effectiveness is this: humility appears to be necessary for leader integrity and for building trust with followers—both of which are key ingredients to successful leadership (Brown & Trevino, 2006; Caldwell et al., 2010; 2006; Kouzes & Posner, 2002; Sankar, 2003). Because humility is characterized by honesty (Ashton & Lee, 2007; Lee & Ashton, 2004) and is necessary for ethical leadership (Brown & Trevino, 2006; Caldwell et al., 2010), humble leaders are likely to be perceived as credible and trustworthy. The importance of honesty, credibility, and trustworthiness of leaders can hardly be overstated. As Kouzes and Posner found in their extensive study of characteristics of admired leaders, honesty was “the single most important ingredient in the leader-constituent relationship” (p. 27). Moreover, they found that “more than anything, people want leaders who are credible. Credibility is the foundation of leadership” (p. 32, emphasis in original). This three-way connection between humility, integrity and trust, and leader effectiveness can be seen in the present study. One of the subscales used to measure Leader Effectiveness in this study was Transformational Leadership, which is itself comprised of Idealized Influence (including Idealized Attributes and Idealized Behaviors), Inspirational Motivation, Intellectual Stimulation, and Individualized Consideration. According to the authors of the instrument used to measure Transformational Leadership (Avolio & Bass, 2007), the Idealized Attributes subscale identifies leaders who are able to build trust in their followers, and the Idealized Behaviors subscale identifies leaders who act with integrity. It logically follows, then, that the relationships found in this study between Humility and Transformational Leadership (and, by extension, Leader Effectiveness) are connected to follower perceptions of the leaders’ integrity and trustworthiness, as suggested by the literature.
A second possible explanation for the relationship between leader humility and effectiveness addresses the link between humility and the second subscale used to measure Leader Effectiveness, Outcomes of Leadership. As described by Nielsen et al. (2010), humility “prevents excessive self-focus and allows leaders to understand themselves and develop perspective in their relationship with followers” (p. 41). They proposed that humility indirectly influences leader effectiveness, defined in terms of positive follower outcomes, through socialized charismatic leader behaviors and follower attributions of leader humility. More specifically, according to their model, humility helps leaders understand followers’ values, seek out their perspectives, and see him or herself in relation to others; serve as a positive role model by working with followers and tying their self-concepts to the group’s vision; and recognize the importance of equitable relationships with followers, demonstrated by requesting and responding to their viewpoints. As a result of these behaviors, humble leaders are able to generate and implement a vision for the group and communicate effectively with followers, which ultimately results in positive follower outcomes such as identification with the leader, trust in the leader, self-efficacy, motivation and willingness to sacrifice. Figure 8 presents this model.

**Confidence and leader effectiveness.** Not surprisingly, the findings of this study are also consistent with previous research demonstrating the importance of confidence (and leader efficacy) for leader effectiveness (see, e.g., Chemers, 2002; De Cremer & van Knippenberg, 2004; Hoy & Smith, 2007; Kouzes & Posner, 2002; Locke, 1991; McCormick, 2001; Sashkin, 2004). Similar to the findings for Humility, the present study found a strong positive correlation between leader Confidence and Leader Effectiveness (RQ1), that high levels of Confidence were associated with high levels of Leader Effectiveness, while low levels of Confidence were associated with low levels of Leader Effectiveness (RQ3). Findings also revealed that
Confidence (as well as Humility) significantly predicted Leader Effectiveness (RQ4). While Task Confidence (a subscale of Confidence) significantly predicted Leader Effectiveness and Transformational Leadership, Leader Efficacy (the other subscale of Confidence) significantly predicted Outcomes of Leadership. When demographic variables were entered into the analysis (RQ5), overall Confidence continued to significantly predict Leader Effectiveness and Transformational Leadership, but did not significantly predict Outcomes of Leadership.

Finding that confidence significantly contributes to leader effectiveness is certainly not groundbreaking, as this relationship has been well-established in the literature. However, the literature has almost exclusively examined leaders’ internal feelings of confidence rather than follower perceptions of leader confidence. Nonetheless, if follower perceptions correspond in
any meaningful way to leaders’ internal sense of confidence, then a discussion of the present findings in view of the literature on leader confidence and effectiveness is relevant.

A number of studies (see, e.g., Chemers, 2002, McCormick, 2001, and Murphy, 2002) have thoroughly analyzed and discussed the reasons for the relationship between leader confidence and leader effectiveness. Murphy (2002) summarized the role of confidence in leadership as follows: “Self-confidence is said to be required in displaying vision formation, rhetorical skills, image and trust building, and personalized leadership, as well as leaders’ management of the impressions they make on others” (p. 169). Based on this statement alone, it is not surprising that Confidence was strongly related to Transformational Leadership (and, by extension, overall Leader Effectiveness) because three of the subscales of Transformational Leadership—Inspirational Motivation, Idealized Influence, and Individualized Consideration—appear to closely correspond to the leadership qualities described by Murphy. According to the authors of the instrument used in the present study to measure Transformational Leadership (Avolio & Bass, 1995, 2007), Inspirational Motivation is designed to identify leaders who articulate shared goals and mutual understandings of what is right and important, and includes items concerning the articulation of a compelling vision of the future and concerning how a leader talks and expresses himself or herself to followers. These behaviors are clearly related to displaying vision formation and rhetorical skills, as identified by Murphy. Idealized Influence is designed to identify leaders who act with integrity (Idealized Behaviors) and who are able to build trust in their followers (Idealized Attributes), and includes items which are not only related to trust building but also appear to be related to image building and impression management, as identified by Murphy. Individualized Consideration is designed to identify leaders who treat each individual uniquely, and includes items which would appear to be related to personalized
leadership as identified by Murphy. The relationships found between Confidence and Leader Effectiveness in the present study, then, can be at least partially explained by the correspondence between the Transformational Leadership subscale and Murphy’s summary of the literature on self-confidence in leadership.

Confidence not only contributed to Transformational Leadership and overall Leader Effectiveness; it also contributed to Outcomes of Leadership in two of three analyses (RQ3 and RQ4; the failure of Confidence to contribute to Outcomes of Leadership in RQ5 will be discussed later). According to the authors of this scale (Avolio & Bass, 1995, 2004), Outcomes of Leadership is intended to reflect the leader’s effectiveness by measuring the success of the group based on three subscales (Extra Effort, Effectiveness, and Satisfaction with Leadership), described as follows:

Success is measured … by how often the raters perceive their leader to be motivating, how effective raters perceive their leader to be at interacting at different levels of the organization, and how satisfied raters are with their leader’s methods of working with others. (p. 97)

The finding that Confidence contributed to Outcomes of Leadership is consistent with the Social Cognitive Model of Self-Regulated Behavior in Leadership presented in Figure 2 (see Chapter 1). According to this model and the theory upon which it is based (Kane et al., 2002; McCormick, 2001), leadership self-efficacy/confidence indirectly contributes to group outcomes such as group performance, group process (e.g., group cohesion and collective efficacy), and members’ favorable perceptions of their leader. Although the three Outcomes of Leadership subscales may not directly correspond to the three types of outcomes identified in Figure 2, there are strong conceptual similarities between the measurement and the model. For example, each of
the three Outcomes of Leadership subscales measures a different aspect of how favorably followers perceive their leaders. This is particularly the case with the Satisfaction with Leadership subscale. One item from the Effectiveness subscale directly measures perceptions of group performance (“Leads a group that is effective”). And the subscale of Extra Effort appears to be conceptually similar to group cohesion and collective efficacy. Thus, the present findings of a relationship between Confidence and Outcomes of Leadership may be explained by the Social Cognitive Model of Self-Regulated Behavior in Leadership.

**Confidence, humility, and leader effectiveness.** One of the unique contributions of this study is its examination of the relationship between leader confidence and humility. Although the literature provides an abundance of studies on confidence and leader effectiveness and some recent conceptual analyses of humility and leader effectiveness, there is very little discussion on the relationship between confidence and humility, and the literature is virtually devoid of empirical studies of this relationship. One reason for the lack of empirical studies of this relationship is that humility has only recently been operationally defined and measured (Owens, 2009), perhaps in response to studies that have called attention to the difficulty of measuring humility (Worthington, 2008) and to the need for the development of reliable, valid, and theoretically informed tools to measure humility (see, e.g., Exline & Geyer, 2004; Morris et al., 2005; Tangney, 2000).

Although humility has been viewed as a virtue by various religious traditions (Morris et al., 2005) and has been found to be viewed favorably as a quality of religious seekers, it has been found to be viewed less favorably as a quality of leaders, perhaps even as a sign of weakness (Exline & Geyer, 2004). Apart from religious contexts, humility in modern Western culture seems to have acquired somewhat negative connotations, sometimes being associated with
concepts that would seem to be incompatible with confidence. For example, humble people may be viewed as being shy or meek, having negative self-views (low self-esteem, a low opinion of the self, or a sense of worthlessness), holding oneself in low regard, or being self-deprecating or timid (Exline & Geyer, 2004; Lawrence, 2008; Tangney, 2000). In the past decade, however, scholars who have analyzed humility have painted a more desirable picture, defining it in terms of dimensions that are not incompatible with confidence, such as self-awareness, openness, and transcendence (Morris et al., 2005), a willingness to view oneself accurately, an appreciation of others’ strengths and contributions, teachability, and a low self-focus (Owens, 2009).

In support of the view that humility is compatible with confidence, Irwin (2009) asserted that “[s]elf-confident competence in our jobs and humility go hand-in-hand” (p. 137). Janney (1952) asserted that leaders who build the most enduring organizations paradoxically possess both great humility and great self-confidence. A small number of empirical studies (Alston, 2005; King et al., 2007; Theoharis, 2008) suggest that effective leaders can possess both confidence and humility. And at least one author (Weinrach, 2006) goes a step further, claiming that not only is humility compatible with confidence, but that it actually requires confidence: “… humility requires a large dose of security and confidence in oneself” (p. 79).

The results of the present study provide strong support for the view that humility, as defined in this study based on Owens (2009), is highly compatible with confidence. Humility was strongly and positively correlated with Confidence, and similarly strong and positive correlations were found between the subscales of Humility and of Confidence (RQ1). Moreover, the two appear to work together in their contributions to Leader Effectiveness, as evidenced by an interaction between the two on Leader Effectiveness (RQ3) and by their mutual contributions to predicting Leader Effectiveness (RQ4 and RQ5). To the extent that follower perceptions of
leader self-confidence correspond in some meaningful way to leaders’ internal sense of confidence, several inferences about the relationship between leader self-confidence and humility based on the results of this study are worthy of consideration.

The analysis of the interaction between Confidence and Humility (RQ3) provides perhaps the most intriguing findings of the study. For leaders with high and moderate levels of Humility, increasing levels of Confidence were accompanied by increasing levels of Leader Effectiveness. For leaders with low levels of Humility, however, increasing levels of Confidence were accompanied by decreasing levels of Leader Effectiveness. Correspondingly, the Low Humility-High Confidence category had the lowest levels of Leader Effectiveness. Assuming that Low Humility-High Confidence leaders are perceived as arrogant, these findings provide further evidence in support of previous studies finding or asserting that arrogance contributes to leader ineffectiveness (Burke, 2006; Chidester et al., 1991; Hogan & Hogan, 2001; Najar et al., 2004; Sala, 2003). These findings also indicate that as leaders become more arrogant, they become less effective (or at least are perceived as being less effective by followers).

Similarly intriguing results were found with regard to leaders with low Confidence. For leaders with high and moderate levels of Confidence, increasing levels of Humility were accompanied by increasing levels of Leader Effectiveness. Within the Low Confidence category, however, an increase in Humility was not accompanied by an increase in either overall Leader Effectiveness or Transformational Leadership, while an increase in Humility was associated with markedly lower ratings of Outcomes of Leadership. For leaders with low levels of confidence, perhaps increased levels of humility only serve to magnify their lack of confidence, and consequently followers perceive these leaders as being doubtful, indecisive, and insecure. Such perceptions may be particularly detrimental to follower assessments of
Outcomes of Leadership, which are based in part on follower satisfaction with the leader. It is noteworthy that moderate levels of humility were associated with low levels of effectiveness only among leaders lacking confidence. Perhaps it is this category of leader (Low Confidence-Medium Humility) whom Machiavellianists and other detractors have in mind when they assert that leaders cannot be both humble and effective, because the Machiavellianists and detractors have mistakenly equated humility with a lack of confidence.

A third intriguing finding from the analysis of the interaction between Confidence and Humility was that not a single case (principal) was categorized as having Low Confidence-High Humility. Contrary to those who might claim that humility and confidence are incompatible with each other, this finding indicates that high levels of humility are incompatible only with low levels of confidence. Although it is possible that this finding may have been due to sampling error, three other possible explanations for this finding are worth considering.

First, perhaps Weinrach (2006) was right in arguing that humility requires a large dose of confidence in oneself. Similarly, when discussing the importance of leaders examining their core beliefs, Caldwell (2009) stated this: “The willingness to conduct this self-examination requires both a personal confidence and authentic humility…” (p. 399). From that premise, one might argue that it is not possible to have a high level of humility without also having at least a moderate level of confidence, and that low levels of confidence cannot produce genuinely humble leaders. A closer examination of this study’s operational definition of humility sheds further light on this point of view. In this study, the Humility scale (Owens, 2009) was comprised of three subscales: Self-Awareness, Appreciation, and Teachability. The Self-Awareness subscale measured the willingness to view oneself accurately, which included awareness of personal strengths and weaknesses, admission of mistakes, and admission of not
knowing how to do something. The Appreciation subscale measured appreciation of others’ strengths and contributions, which included taking notice of others’ strengths and complimenting others on their strengths. And the Teachability subscale measured willingness to learn, which included being open to the ideas and advice of others and actively seeking feedback even if it is critical. It might reasonably be argued that one cannot—or at least is not likely to—consistently engage in these humble behaviors without first possessing a certain level of personal security and internal sense of self-confidence.

A second possible explanation for the lack of Low Confidence-High Humility leaders may be that leaders with low confidence eventually lose their motivation to lead, especially when accompanied by moderate levels of humility. In this study, Low Confidence-Medium Humility leaders were consistently rated as having among the lowest levels of leader effectiveness. Having a moderate level of humility, which includes self-awareness, these leaders may recognize that they are not being effective and, because of their not possessing a strong level of confidence, they may interpret setbacks as personal failures. Moreover, perhaps the combination of Low Confidence and Medium Humility causes them to blame themselves unduly for their setbacks, attributing their failures to enduring personal shortcoming that they feel unable to change. Consequently, they become discouraged, lose their motivation to lead, and leave their leadership roles for non-leadership positions. Support for this proposition is found in a theoretical model of leadership proposed by Chan and Drasgow (2001), in which Leadership Self-Efficacy (confidence) and Personality (which might include humility) directly impact the leader’s Motivation to Lead, and in which both Personality and Past Leadership Experiences influence Leadership Self-Efficacy in its impact on Motivation to Lead. This framework is reproduced in Figure 9.
A third possible explanation for the lack of Low Confidence-High Humility leaders is similar to the previous one. One might reasonably expect that individuals who have low levels of confidence are not attracted to positions of leadership (e.g., the principalship) in the first place, and perhaps this is especially the case for individuals with low levels of confidence combined with high levels of humility. Based on their high levels of self-awareness of their strengths and limitations, combined with a lack of confidence in their leadership abilities, perhaps these individuals either fail to develop a motivation to lead, or they assess themselves to be a poor fit for the leadership role and therefore choose to pursue other professional roles.

Another noteworthy result related to confidence, humility, and leader effectiveness was found in the exploratory analyses conducted for RQ4a to identify which of the subscales of Confidence and of Humility significantly predicted Leader Effectiveness. These analyses found
that of the three Humility subscales, Appreciation and Self-Awareness significantly predicted Leader Effectiveness; Teachability did not do so. Of the two Confidence subscales, Task Confidence predicted Leader Effectiveness and Transformational Leadership, whereas Leader Efficacy predicted Outcomes of Leadership. As reported in Chapter 4, these findings were only partially explained by the relative strength of the correlations between the Confidence and Humility subscales with Leader Effectiveness and its subscales.

The finding that Appreciation and Self-Awareness significantly predicted Leader Effectiveness and its subscales, while Teachability failed to do so, is intriguing. Appreciation and Self-Awareness had slightly stronger relationships with both Transformational Leadership and Outcomes of Leadership than did Teachability. Transformational Leadership includes subscales of Idealized Influence and Inspirational Motivation; Outcomes of Leadership includes subscales of Extra Effort and Effectiveness (Avolio & Bass, 1995). The items in these subscales appear to reflect leaders’ willingness and ability to exert influence on their followers and their organization. Perhaps, then, Teachability failed to predict both Transformational Leadership and Outcomes of Leadership (and, by extension, Leader Effectiveness) because, whereas Teachability reflects leaders’ willingness to be influenced by followers (i.e., to be a recipient of followers’ influence) Transformational Leadership and Outcomes of Leadership reflect their ability to be an influential agent on followers.

The finding that Task Confidence predicted Transformational Leadership (and overall Leader Effectiveness) whereas Leader Efficacy predicted Outcomes of Leadership may be related to the fact that Transformational Leadership measured teachers’ perceptions of their principals’ behaviors, whereas Outcomes of Leadership measured teachers’ perceptions of the results or success of those behaviors on group performance (Avolio & Bass, 1995, 2004). More
to the point, Task Confidence measured teachers’ perceptions of their principals’ confidence related to specific leadership tasks, the majority of which appear to be conceptually related to three of the subscales of Transformational Leadership as described by Avolio and Bass. Figure 10 outlines these relationships.

Figure 10. Relation of Task Confidence Items and Transformational Leadership Subscales.

<table>
<thead>
<tr>
<th>Task Confidence Items</th>
<th>Transformational Leadership Subscales</th>
</tr>
</thead>
<tbody>
<tr>
<td>Influence staff to pursue a desired course of action.</td>
<td>Idealized Influence</td>
</tr>
<tr>
<td>Foster trusting, positive relationships.</td>
<td></td>
</tr>
<tr>
<td>Generate enthusiasm for a shared vision of the school.</td>
<td>Inspirational Motivation</td>
</tr>
<tr>
<td>Get staff to work together to achieve a common goal.</td>
<td></td>
</tr>
<tr>
<td>Build consensus among staff concerning the goals and direction of the school.</td>
<td>Individualized Consideration</td>
</tr>
<tr>
<td>Motivate staff.</td>
<td></td>
</tr>
<tr>
<td>Provide helpful guidance and direction to staff.</td>
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<tr>
<td>Promote teacher development.</td>
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Leader Efficacy, on the other hand, was designed to measure teachers’ perceptions of their principals’ confidence in their general leadership abilities, as reflected by the level of goals they set, their willingness to take on difficult tasks and situations, their persistence in the face of difficulty, their emotional stability in responding to stressful situations, and their level of certainty regarding their ability to achieve their goals and make their plans work (Chemers, 2002; Kirkpatrick & Locke, 1991; McCormick, 2001). If follower perceptions of leader confidence correspond to leaders’ internal feelings of confidence, the finding that Leader Efficacy predicted Outcomes of Leadership indicates that principals’ confidence in their general leadership abilities was a significant predictor of group success, as measured by perceptions of the degree to which principals engendered extra effort and teacher satisfaction and were effective in leading a group and interacting at different levels of the organization (Avolio & Bass, 1995, 2004). This finding is consistent with the Social Cognitive Model of Self-Regulated Behavior in Leadership (Kane et al., 2002; McCormick, 2001), depicted in Figure 2, and as explained earlier in this chapter under the discussion on Confidence and Leader Effectiveness. However, based on this same model, one might also have expected Task Confidence to predict Outcomes of Leadership. Because Task Confidence failed to predict Outcomes of Leadership in this study, further research is needed to shed more light on this relationship.

A final finding worthy of discussion here pertains to the analyses of RQ5. Interestingly, when demographic variables were taken into account, Humility—but not Confidence—significantly predicted Outcomes of Leadership. Relatedly, Humility was more strongly correlated than Confidence with Outcomes of Leadership. These findings indicate that humility may actually be a more significant predictor than confidence of leader effectiveness as measured by positive follower outcomes. Moreover, humility may generate greater satisfaction and extra
effort among followers, in accordance with Figure 8 above (Nielsen et al., 2010), than does confidence. Nonetheless, because the failure of Confidence to predict Outcomes of Leadership in RQ5 was somewhat surprising, further research is needed in this area.

Skeptical Views of Follower Perceptions

Despite the findings of this study, skeptics such as those adhering to a Machiavellian view of leadership might continue to argue against the importance of humility for effective leadership for two reasons. First, while they may concede that it is necessary for a leader to be perceived as humble by their followers, they may contend that it is not necessary for leaders to genuinely be humble—only to appear as such to their followers (Machiavelli, 1513/1995). From this perspective, follower perceptions can be influenced, even deceitfully manipulated, by the truly clever leader. Second, skeptics may argue that leader effectiveness can be defined in a number of ways, and that humility is incompatible with certain definitions of effectiveness.

With regard to the first argument, what the skeptics fail to recognize are the dangers of arrogance. Leaders who believe they can fool their followers are demonstrating a sense of superiority over them—which tends to blind them to their own personal limitations, causing them both to overestimate their ability to pretend to be humble on a consistent, long-term basis and to underestimate their followers’ ability to see through their pretense (Brunell et al., 2008; Kanter, 2004, 2010; Khan, 2008; Sala, 2003; Tiberius & Walker, 1998). Although such leaders may, in the short run, successfully appear to be humble, their inauthenticity and lack of integrity will eventually—perhaps sooner rather than later—reveal their true character (Blair et al., 2008; Sankar, 2003; Walumbwa et al., 2008). One might reasonably expect such leaders to quickly tire of the effort required to pretend to be humble and resort instead to the use of overt power and manipulation to induce follower compliance.
With regard to the second argument, certainly it is true that leader effectiveness may be defined in many ways. According to the Machiavellian viewpoint, for example, effectiveness is defined as acquiring and using power for personal gain, using whatever means are necessary to that end (Morris et al., 2005). Humility is certainly not likely to achieve or be compatible with that kind of “effectiveness.” However, while the Machiavellian definition of leader effectiveness may have been practical (if not ethical) for political rulers in the 16th century, no serious student of leadership in the 21st century would espouse such a definition—even in the arenas of politics and big business, which have in recent years produced some of the most notorious examples of arrogant leaders who have fallen from their leadership positions. Moreover, leaders who hold such a narcissistic view of leadership have been linked to leadership practices such as deceit and coercion that are ultimately ineffective and contribute to a leaders’ demise (Blair et al., 2008; Brunell et al., 2008; Ludwig & Longenecker, 1993; Morris et al., 2005).

Demographic Variables

Somewhat surprisingly in light of previous studies reviewed in Chapter 2, the present study (RQ2) found no differences in the study’s primary variables based on the leaders’ (principals’) sex, level of education, race, or experience in their position, or based on the followers’ (teachers’) sex, level of education, or race. Significant differences were found in some analyses based on school Report Card Grade, followers’ years of Teaching Experience, and the schools’ Number of Students. As reported in Chapter 4, however, further analyses of these variables appears to indicate that Report Card Grade, Teaching Experience, and Number of Students in and of themselves had a negligible impact on the study’s primary variables. Perhaps a larger sample size would have brought clarity to the impact of these variables.
The most noteworthy finding concerning demographic variables and leader effectiveness was produced by the analysis of RQ5, in which District Typology (as defined by district income level) was the only demographic variable that significantly predicted Leader Effectiveness. Interestingly, none of the demographic variables found as having significant differences on Leader Effectiveness in the analyses of RQ2 (i.e., Teaching Experience, Report Card Grade, Number of Students) predicted Leader Effectiveness in the analyses of RQ5. It is not surprising that District Typology/Income predicted Leader Effectiveness, because this variable served as a proxy for school district socioeconomic status (SES). As noted in Chapter 2, the relationship between a school community’s SES and student achievement is well documented in the educational research literature. Assuming that the effectiveness of school leaders is judged to some degree by student achievement levels, it follows that community SES may indirectly contribute to perceptions of leader effectiveness.

**Implications for Leadership Practice**

This study has some potentially important implications for leadership practice, including reflective practice, leadership development programs and the process of selecting individuals for leadership positions.

**Reflective practice.** The present study provides current leaders with ample reason to reflect on their own leadership practices as they seek to become more effective and to evaluate the extent to which they demonstrate humility in their leadership role. As defined in this study, humility includes being teachable, showing appreciation for the contributions of others, and demonstrating self-awareness (including acknowledging one’s strengths and weaknesses). This study suggests that leaders would do well to evaluate their behaviors and attitudes in consideration of this definition.
Self-reflection involves examining one’s personally held beliefs and becoming aware of one’s self-serving biases (Morris et al., 2005). Reave (2005) wrote a thorough discussion of the importance of leaders engaging in reflective practice, based on empirical evidence of how such practice benefits leadership performance. According to Reave, reflection involves not only individual self-examination, but also communication with God through prayer, meditation, spiritual reading, and journaling. Yanow (2009) advocated that self-reflection occur not only at the end of the day—and, by implication, certainly not wait until the end of a week or year or career—but should be engaged in throughout the day when one senses that things aren’t going as one thought they should. Yanow further proposed that “passionate humility’ may be one of the criteria requisite for the cultivation of reflective practice…” (p. 579). Such humility and reflection, according to Yanow, recognizes the uncertainty of one’s knowledge and opens one to new (and potentially) better ways of knowing and understanding his or her situation. Similarly, Reville (2005) discussed the need for educational administrators to demonstrate humility by engaging in continuous study, observation, and listening with an open mind. Reville stressed that educational reformers (presumably leaders) need to recognize the insufficiency of their knowledge and be skeptical of certainty, despite their eagerness to tout the latest and greatest methods of school reform and improvement. Additional authors who have advocated that leaders should engage in reflective practice or “silent moments” include Carter (1998), Heifetz and Linsky (2002) and Kouzes and Posner (2002).

Leadership development programs. The present study provides some intriguing findings for leadership development programs, in both academic and nonacademic settings. The findings that lower levels of humility corresponded to lower levels of leader effectiveness and that higher levels of humility corresponded to higher levels of effectiveness, as well as that
humility significantly predicted leader effectiveness indicate that humility is an important attribute of effective leaders. Based on these findings, and in light of the literature that demonstrates a connection between arrogance and leader ineffectiveness, then, leadership development programs might develop more effective leaders by seeking to develop their humility and build their leadership confidence. Participants in such programs would benefit from discussion of the importance of maintaining a humble attitude as a leader, and reviewing specific behaviors that reflect such an attitude. Such programs might include case study analyses in which participants evaluate the extent to which a specific leader has demonstrated aspects of humility such as teachability, appreciation of others’ strengths and contributions, and an accurate self-assessment. Furthermore, to promote development of an accurate self-awareness among participants, such programs might involve 360-degree feedback, in which participants’ self-reports of their leadership behaviors are compared to others’ assessments of their leadership.

Moreover, results of this study affirm the importance of building the confidence of aspiring leaders. Therefore, it would seem advisable for leadership development programs to provide participants with opportunities to experience both success, to build their confidence, and some degree of failure, to encourage them to be teachable and humble. This recommendation is supported by Allen and Wegin (2009), who suggested that leadership development programs seek to build participants’ self-efficacy through a process of assessment, in which participants become more aware of their strengths, weaknesses and how others perceive them, and through challenging experiences that force people out of their comfort zones. McCormick, Tanguma, and Lopez-Forment (2002) proposed a model of the factors and processes involved in the development of leadership self-efficacy beliefs, and proposed that enhancing such beliefs “should be an additional objective for leadership educators when they design and deliver courses,
seminars and workshop” (p. 44). Tschannen-Moran (2005) also suggested that school principal preparation include the cultivation of self-efficacy beliefs, and provided several recommendations for how such beliefs might be developed.

Several studies support the need for leadership development programs to emphasize the importance of humility. In reviewing the importance of the integrity and character of leaders, Hernez-Broom and Hughes (2004) cited humility as one of several character qualities that need greater clarity of concept in order to play a more prominent role in organizational leadership development practices. In discussing the importance of follower attributions of humility, Nielsen et al. (2010) questioned how leaders gain follower attributions of humility and asked if leaders should be trained to engage in impression management—implying that leaders may need to be trained to properly demonstrate humility. Lawrence (2008) recommended that the next generation of leaders be educated based on a concept of leadership that is anchored in strength and humility. Finally, Morris et al. (2005) suggested that future research “examine the creation and application of humility by leaders as part of a critical component in any leadership development process, since modern leadership theory indicates that leaders are made, not born” (p. 1344). These authors further proposed that the development of humility “reaches beyond the prescription of specific styles or behaviors in which one should engage” (pp. 1344-1345) and that the starting point for such development may be self-reflection. Moreover, they asserted that developing greater humility is inextricably linked with developing one’s spirituality.

**Leadership selection.** The strong relationship between humility and leader effectiveness demonstrated by this study might reasonably lead to this question: When is the last time a posting for a position of leadership listed humility as one of the requirements of the position? Although the criteria for selecting leaders undoubtedly vary depending on organizational purpose
and context, it seems safe to say that the answer to this question is this: rarely if ever. Thus, the present study also provides some intriguing findings for those who are responsible for selecting individuals for leadership positions. In their review of the literature on personality and emergent leadership, Brunell et al. (2008) identified traits of individuals who rise to positions of leadership, which include being extraverted, socially skilled, and interpersonally dominant—traits that typify a person with confidence. One might logically infer from this, as well as from common observation and experience, that—at least in the United States—confidence is considered a highly valued indicator of leadership potential. While the present study is only one of many that confirms the importance of confidence as an attribute of leadership, there is a danger of selecting leaders based on confidence without also giving attention to their humility: the selection of leaders who are prone to overconfidence, arrogance, narcissism, and Machiavellianism. Based on the results of this study, then, as well as the literature demonstrating a connection between arrogance, narcissism, Machiavellianism and leader ineffectiveness (as reviewed in Chapter 2), those responsible for leader selection would be well-advised to consider a leadership candidate’s humility as part of the selection process, and to select leaders who demonstrate both confidence and humility and who are perceived as being both confident and humble by others who know them well.

Limitations and Recommendations for Future Research

This section presents limitations and delimitations of the present study which constrain the generalizability of results, and recommendations for future research. The recommendations for future research are based on limitations and delimitations of the sample, organizational context, cultural context, measurements, and variables used for the present study. A final recommendation is based on the implications of the present study for leadership development.
Sample. First, by design, this study included a convenience sample comprised only of teachers taking on-campus graduate-level Education courses at one Midwestern public university. As such, the sample does not purport to be representative of the entire population of teachers in the immediate geographic region in which it was conducted, much less of a larger geographic area. The results may have been different with a different sample of teachers, including those from other (more urban) geographic areas, those not taking graduate-level Education courses, those taking graduate-level Education courses at another college or university, or those taking only on-line graduate-level Education courses. Based on this limitation, it is recommended that similar studies be conducted with a broader sample of teachers, to provide a broader representation of teachers across geographic areas and to reflect a wider diversity of teachers’ racial/ethnic backgrounds.

Future studies of this type should also include a larger sample size. The present study was based on only 137 participants. A larger sample size might present a clearer picture of demographic differences in leader effectiveness, confidence, and humility and bring clarity to the findings of the present study in this regard, particularly concerning the interaction between report card grade and teaching experience. It might also provide a basis for investigating possible differences in the perceptions of novice teachers (i.e., those with 0-2 years of teaching experience) and those of more experienced teachers using a larger sample size.

Organizational context. This study also did not examine some potentially significant elements of the organizational context of leadership. For example this study examined follower perceptions of leadership only in K-12 educational settings. The results may have been different for employees who work in higher education or in noneducational settings, such as for-profit businesses, nonprofit organizations, and government agencies, and may also have been different
between union vs. non-union environments. Within K-12 educational settings, the present study did not examine potential differences between public vs. private schools or charter vs. non-charter schools. Additionally, this study examined only school teachers as followers and principals as leaders. Results may have been different for perceptions of school Superintendents. Based on these limitations, it is recommended that similar studies be conducted with employees working in settings other than K-12 education, in both union and non-union environments. Similar studies are also warranted concerning perceptions of school Superintendents and perceptions of leaders at multiple levels of organizational hierarchy.

Additionally, it is possible that leader effectiveness is judged differently in organizations in which “the ship is about to sink” than in those sailing on relatively smooth waters. Accordingly, future research might examine the role organizational stability plays in the relationship between humility, confidence, and leader effectiveness.

Cultural context. Because this study was limited to teachers’ perceptions of principals in the United States, future studies like this one are recommended in other cultures. This recommendation is consistent with Morris et al. (2005), who recommended future research on the possible moderating/mediating effects that culture may have on the relationship between humility and the leadership process. They suggested that humble leaders in individualistic, masculine, and high power distance cultures may be perceived as less effective than those in collectivistic, feminine, or low power distance cultures. Similarly, one might speculate that collectivist cultures, which place an emphasis on others, value humility more than individualistic cultures, which place an emphasis on the self. Cultural differences in self-efficacy (confidence) should also be examined, in accordance with previous research suggesting that the importance of self-efficacy for leader effectiveness is greater in Western cultures and that cultural
masculinity/femininity and individualism/collectivism affects perceptions of self-efficacy (Turetgen et al., 2008).

**Measurements.** One measurement-related limitation of this study is that it did not examine statistical relationships between leader Confidence or its subscales (Leader Efficacy and Task Confidence) and Humility or its subscales (Teachability, Appreciation, and Self-Awareness) in relation to the subscales of Transformational Leadership—Idealized Influence (including Idealized Attributes and Behaviors), Inspirational Motivation, Intellectual Stimulation, and Individualized Consideration. Because further analysis of these relationships could provide additional insight into the findings of the present study, future research examining these relationships is recommended.

A second measurement-related limitation of this study was its focus on follower perceptions of leader confidence. While the measurement of follower perceptions of leader confidence is important and adds a unique contribution to the literature, a growing body of research (as reviewed in Chapter 2) demonstrates a strong relationship between leaders’ self-reported feelings of leadership efficacy and leader effectiveness. Accordingly, it is recommended that future research examine the relationship between humility, self-reported leadership efficacy, and leader effectiveness. Future studies conducted in K-12 educational settings might use measures of self-reported leadership efficacy designed specifically for principals (Tschannen-Moran & Gareis, 2004) or for school administrators (McCollum & Kajs, 2009). Such studies might also examine the degree to which follower perceptions of leader confidence reflect leaders’ self-reported feelings of confidence in their leadership abilities.

Relatedly, additional research is also recommended in which discrepancies between leaders’ self-ratings, superiors’ ratings, and followers’ ratings of leader effectiveness are
compared with perceptions of humility as measured by the Owens (2009) Humility Scale. As noted by Reave (2005), one way to measure humility is to compare self-ratings with ratings by others. Van Velsor et al. (1993) found that managers who overrated themselves (an indication of a lack of humility) were perceived by followers as less effective. Comparing data from two different types of humility measures may provide some useful and interesting measurement insights to further progress the study of humility in leadership. Moreover, such comparisons may provide insight into the potential benefits and/or drawbacks of 360-degree feedback.

Furthermore, while this study examined Outcomes of Leadership as measured by follower perceptions, it did not include analysis of leader confidence and humility in relation to objective measures of leadership outcomes such as the school’s report card grade or student performance on standardized tests. Future research is also needed in this regard.

Variables. Several constructs, to be reviewed in the next three paragraphs, were not investigated in the present study but have been linked either theoretically or empirically to confidence, humility, and/or leader effectiveness. Including these constructs as variables in future studies of this type should enhance the understanding of how confidence and humility contribute to leader effectiveness.

Transactional leadership. According to Avolio and Bass (2004), transactional leadership is “an essential component of the full range of effective leadership” (p. 20). The MLQ 5x-Short (Avolio & Bass, 1995, 2004) includes a scale for Transactional Leadership, which was not used in the present study. A study of the relationship between confidence, humility, and transactional leadership would complement the results of the current study.

Impression management. According to Chemers (2002), “creating the impression of competence and trustworthiness is an essential element of effective leadership, and little
influence is possible until a leadership image is established” (p. 142). The ways in which effective vs. ineffective leaders engage in impression management related to confidence and humility, and how such impression management relates to leaders’ authenticity and integrity, present intriguing avenues of future study.

**Other constructs.** Empirical examination of the relationship between humility and other constructs such as emotional intelligence, narcissism, arrogance, and ethical leadership is also recommended. According to the literature reviewed in Chapter 2, linkages have been found between humility, emotional intelligence, ethical leadership, and leader effectiveness as well as between arrogance, narcissism, unethical leadership, and leader ineffectiveness. However, empirical studies are needed to test these relationships.

**Leadership development implications.** Finally, based on the implications of this study for leadership development programs (as discussed above), future research is recommended on humility develops. Such research might examine if humility is a relatively stable personality trait, as proposed by Lee and Ashton (2004) or if, as Aristotle (Ross, trans., 1908) might suggest, humility is a virtue that can be acquired through practice. It might also examine the role of spiritual practices such as prayer, meditation, etc. in the development of humility. Relatedly, qualitative research might examine common developmental experiences among leaders who are rated as having high levels of confidence, humility, and effectiveness.

**Conclusion**

This study adds one more voice to the growing chorus of researchers and practitioners asserting the importance of humility as an attribute of effective leadership (see, e.g., Collins, 2001; Covey, 1989; Kouzes & Posner, 2002; Lawrence, 2008; Morris et al., 2005; Nielsen et al., 2010; Reave, 2005; Schein et al., 2001; Sankar, 2004; and Senge, 2005).
 leadership development programs are to include an emphasis on humility and leader selection processes are to include consideration of applicants’ humility, then those responsible for such programs and processes must first value humility as an important leadership attribute. Unfortunately, it appears that humility remains a largely undervalued leadership quality in much of Western culture. While there are few outspoken critics of the call for humility in leadership, the lack of attention given to this topic in the literature—at least until recently—may be indicative of a commonly held view that humility simply isn’t important enough to be considered worthy of much attention. Two decades ago, for example, Kirkpatrick and Locke (1991) authored an article they entitled *Leadership: Do Traits Matter?* They provided evidence that traits do indeed matter, and identified six core leadership traits: drive (including the desire for achievement, ambition, energy, tenacity and initiative), leadership motivation (the desire to influence and lead others or the desire for power), honesty and integrity (which gives leaders credibility with followers), self-confidence (including emotional stability), cognitive ability, and knowledge of the business (technical expertise). Noticeably absent from this list is the trait of humility—yet humility appears to be necessary for one of those six core traits, honesty and integrity, as discussed earlier in this chapter. Similarly, in his article entitled *What Makes a Leader?*, Goleman (1998) identified the five components of emotional intelligence at work: self-awareness (including self-confidence and realistic self-assessment), self-regulation, motivation, empathy, and social skill. Again, conspicuously absent from this list and from the article was any reference to humility, despite its seemingly obvious association with emotional intelligence through the component of self-awareness—which, interestingly, was a subscale of humility in the present study. To further support the point that humility is often considered relatively
unimportant with regard to leadership, at least one study (Exline & Geyer, 2004) has provided empirical evidence that humility is not valued as an attribute of leaders. Moreover, Sorcher and Brant (2002) identified modesty and humility as attributes that are undervalued in the leadership selection process.

The value placed on humility seems to vary according to cultural dimensions. Turetgen et al. (2008, citing Hofstede, 1991) reported that different types of cultures create different kinds of leader-heroes. In contrast to Chinese leadership, in which humility is viewed and valued as integral to the leadership process (Cheung & Chan, 2005), popular Western notions of leadership have often centered on heroism and infallibility, according some leaders with celebrity-like status (Lawrence, 2008; Morris et al., 2005). Yukl (1999) has criticized the heroic leadership bias found in transformational leadership theories, which assume that effective leadership involves leaders’ influencing followers to make self-sacrifices and exert exceptional effort while neglecting the potential for reciprocal influence processes between leaders and followers and shared leadership. Badaracco (2001) and Lawrence have also challenged notions of heroic leadership. In his article entitled *We Don’t Need Another Hero*, Badaracco argued that the most effective moral leadership is provided by those who modestly work behind the scenes for quiet victories. And Lawrence has called for a re-evaluation of what we expect from our leaders, and for a new view of leadership—one that acknowledges humility as an important characteristic of effective leaders.

Certainly Collins’ (2001) conceptualization of Level 5 Leadership reflects a new view of leadership, one with a greater acknowledgement of, and emphasis on, the value of humility as an important leadership attribute. As noted at the beginning of this concluding section, a number of reputable leadership experts in addition to Collins have recognized and advocated the value of
humility in leadership. And former New York City Mayor Rudy Giuliani once asserted that the key to leading is showing humility and not trying to hide areas of weakness, even in the arena of politics (Schramm, 2002). Perhaps such attention, along with the voices of scholars cited in this study, will ultimately give rise to the widespread acceptance of humility as a valued attribute of effective leaders. Perhaps even the present study will help pave the way for such acceptance.

Sherron Watkins (2006), former Vice President of Enron, spoke directly to the value of humility in leadership, when she wrote:

I still wonder whether we truly recognize and value the appropriate traits in our leaders. We want honest leaders who are decisive, creative, optimistic, and even courageous, but we so easily settle for talk that marks those traits instead of action. Worse we often don’t even look for one of the most critical traits of a leader: humility…. (p. 35)

To paraphrase the question posed by Kirkpatrick and Locke (1991): Do leadership traits such as confidence and humility matter? According to the present study, the answer would certainly seem to be a resounding “yes”—and of the traits that do matter, perhaps one of the most important is that of humility.
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APPENDIX A
Selected Popular Press and Professional Publications

Advocating for Humility in Leadership


APPENDIX B

Selected Website, Popular Press, and Professional Publications

Describing Arrogance as a Danger for Leaders


APPENDIX C

Perceptions of School Leadership Survey

Instructions:
A. Please use your answer sheet to respond to the questions on this survey. Please make sure that your response on the answer sheet corresponds to the appropriate item on the survey.

B. Answer the questions in this survey based on your current employment:
   • If you are a teacher, guidance counselor, school psychologist, or assistant principal please answer the questions with regard to your building principal.
   • If you work with more than one building principal, please select one whom you know well, and answer the questions as related to that principal.
   • If you are a principal, please answer the questions with regard to your superintendent (substitute “superintendent” for “principal”).
   • If you are not employed by a school, please answer the questions with regard to your supervisor (substitute “supervisor” for “principal”).

School Information
Complete these two items only if you are employed by a public school in Ohio. If you are not employed by a public school in Ohio, skip to the Demographic Information.

School Typology:
Attached to this survey is a listing of all public school districts in Ohio, organized by County. Next to each district’s name is a number from 0 to 7, indicating your school’s “typology” as designated by the Ohio Department of Education. **Find your school district’s name, and indicate your school district’s typology, in column A in the bottom left section of your answer sheet** (under “Identification Number”). If you work for a Joint Vocational School, your school district will not be included on the attached list. In this case, fill in the number 8 in column A.

School Report Card Grade:
What is the ODE-designated school report card grade for your school building? **Indicate your school’s report card grade in column K in the bottom left section of your answer sheet** (under “Special Codes”).
   • If you work in more than one building, this question applies to the building supervised by the principal about whom you will be answering the survey questions.
   • If you are a principal, please indicate the report card grade for your district.
0= Academic Emergency or Academic Watch
1= Continuous Improvement
2= Effective
3= Excellent
4= Excellent with Distinction
Demographic Information

1. Your sex:  
   A= Female  B= Male

2. Your highest level of education completed:  
   A= Bachelor’s degree  B= Master’s Degree  C= Specialist Degree  D= Other

3. Your race/ethnicity:  
   A= Caucasian  B= African American  C= Hispanic/Latino  D= Other

4. Are you currently employed by a public school in Ohio?  
   A= Yes  B= No

5. Your current occupation:  
   A= teacher  
   B= guidance counselor or school psychologist  
   C= assistant principal  
   D= principal  
   E= other

6. How many years of paid teaching experience do you have (including public, private and charter schools)?  
   A= 0-2 years  B= 3-5 years  C= 6-10 years  D= 11-15 years  E= 16 or more years

7. If you are not currently a teacher, how many total years of experience do you have in your current occupation (as identified in question 5), including both at your current school and other schools? (Leave blank if you are currently a teacher.)  
   A= 0-2 years  B= 3-5 years  C= 6-10 years  D= 11-15 years  E= 16 or more years

8. Your principal’s sex:  
   A= Female  B= Male

9. Your principal’s highest level of education completed:  
   A= Master’s Degree  B= Specialist Degree  C= Doctorate  D= Don’t know

10. Your principal’s race/ethnicity:  
    A= Caucasian  B= African American  C= Hispanic/Latino  D= Other

11. How many years of experience does your principal have as a principal, including both at your school and at other schools? (Leave blank if you don’t know.)  
    A= 0-2 years  B= 3-5 years  C= 6-10 years  D= 11-15 years  E= 16 or more years

12. How many years have you worked with this principal?  
    A= 0-2 years  B= 3-5 years  C= 6-10 years  D= 11-15 years  E= 16 or more years
13. Approximately how many teachers does your principal supervise?
   A=100 or more  B= 75-99  C= 50-74  D= 25-49  E= Fewer than 25
   • If you are a principal: How many people does your superintendent directly supervise
     A=25 or more  B=20-24  C=15-19  D= 10-14  E= Fewer than 10

14. Approximately how many students attend your school building? (Leave blank if you are not employed by a school.)
   A= 500 or more  B= 400-499  C=300-399  D= 200-299  E= fewer than 200
   • If you are a principal: Approximately how many students are enrolled in your district?
     A=3900 or more  B=2925-3899  C=1950-2924  D=975-1949  E=fewer than 975

Leadership Attributes and Behaviors
Answer all of the remaining questions based on your overall observations and experiences when working with your principal. Give your general impressions of his/her behavior related to each item.

For questions 15-45, please rate your level of agreement with each statement, using the following ratings:
A=strongly disagree  B=disagree  C=neutral  D=agree  E=strongly agree

My principal…
15. Is willing to learn from others.
16. Shows appreciation for the unique contributions of others.
17. Actively seeks feedback, even if it is critical.
18. Acknowledges when others have more knowledge and skills than himself/herself.
19. Takes notice of others’ strengths.
20. Often compliments others on their strengths.
21. Is open to the advice of others.
22. Admits it when he or she makes mistakes.
23. Is open to the ideas of others.
24. Admits it when he or she doesn’t know how to do something.
25. Shows awareness of personal strengths and weaknesses.
26. Sets challenging goals for himself/herself and the school.
27. Works hard to achieve his/her goals even when faced with adversity or obstacles.
28. Is willing to take on difficult tasks and situations.
29. Is calm under pressure.
30. Displays certainty that he/she can make his/her plans work.
31. Displays confidence in his/her leadership capabilities.
32. Expects to achieve his/her goals.
33. Is confident that his/her way of doing things will work out for the best.

For items 34-45, please rate your impressions of your principal’s confidence related to each item, not your impressions of his/her abilities.

My principal displays/demonstrates confidence that he/she can…

34. Influence staff to pursue a desired course of action.
35. Manage interpersonal conflicts between staff.
36. Motivate staff.
37. Generate enthusiasm for a shared vision for the school.
38. Lead change initiatives in the school.
39. Get staff to work together to achieve a common goal.
40. Build consensus among staff concerning the goals and direction of the school.
41. Provide helpful direction and guidance to staff.
42. Promote teacher development.
43. Develop a positive school climate.
44. Foster trusting, positive relationships between himself/herself and staff.
45. Determine the best course of action when making decisions and solving problems.

46. Over all, how would you rate the level of confidence your principal displays as a leader?
   A=very low       B=low        C=moderate       D=high       E=very high

For questions 47-66, please rate how frequently your principal displays each behavior, using the following scale:
   A=not at all    B=once in awhile    C=sometimes    D=fairly often    E=frequently, if not always

[Only 4 items are displayed here due to copyright restrictions.]

52. Talks enthusiastically about what needs to be accomplished.

…. 
61. Considers me as having different needs, abilities, and aspirations from others.

....

64. Suggests new ways of looking at how to complete assignments.

65. Emphasizes the importance of having a collective sense of mission.

....

For questions 67-75, please rate how frequently each statement describes your principal’s leadership:
A=not at all    B=once in awhile    C=sometimes    D=fairly often    E=frequently, if not always

[Only 1 item is displayed here due to copyright restrictions.]

....

74. Increases my willingness to try harder.

....
APPENDIX D

Descriptions of the Transformational Leadership and Outcomes of Leadership Subscales of the MLQ 5x (Avolio & Bass, 2007)

**Transformational Leadership**

The IDEALIZED ATTRIBUTES scale identifies leaders who are able to BUILD TRUST in their followers. They inspire power and pride in their followers, by going beyond their own individual interests and focusing on the interests of the group and of its members. Thus, they become reference models for their followers. High scores on this scale identify leaders whom their followers attribute these special qualities. At no moment the scale suggests the objective presence of such qualities.

The IDEALIZED BEHAVIORS scale identifies leaders who ACT WITH INTEGRITY. High scores on this scale are typical for leaders who manifest positive and highly valued behaviors, like dominance, consciousness, self-control, a high moral judgment, optimism and self-efficiency. They talk about their most important values and beliefs, they focus on a desirable vision and almost always consider the moral and ethical consequences of their actions. They also zero in on building a commonly shared sense of a vision or mission for the team or group.

The INSPIRATIONAL MOTIVATION scale identifies leaders who INSPIRE OTHERS. Often, inspiration can occur without the need for identification of associates with the leader. Inspirational leaders articulate, in simple ways, shared goals and mutual understanding of what is right and important. They provide visions of what is possible and how to attain them. They enhance meaning and promote positive expectations about what needs to be done. The question one must ask is, "Whom are they inspiring themselves or the greater good of their group, unit, organization, and/or community?"

The INTELLECTUAL STIMULATION scale identifies leaders who are able to ENCOURAGE INNOVATIVE THINKING. In addition to Idealized Influence and Inspirational Motivation, transformational leadership also involves the intellectual stimulation of associates' ideas and values. Through Intellectual Stimulation, transformational leaders help others to think about old problems in new ways. They are encouraged to question their own beliefs, assumptions, and values, and, when appropriate, those of the leader, which may be outdated or inappropriate for solving current problems. As a consequence, associates develop the capacity to solve future problems unforeseen by the leader. Associates learn to tackle and solve problems on their own by being creative and innovative. A key measure of a leader's effectiveness is how capable their associates are when operating without the leader's presence or direct involvement. An intellectually stimulating leader arouses in others a greater cognizance of problems, awareness of their own thoughts and imagination, and recognition of their beliefs and values.

The INDIVIDUAL CONSIDERATION scale identifies leaders who are able to COACH PEOPLE. Individualized Consideration is another aspect of transformational leadership. It means understanding and sharing in others' concerns and developmental needs and treating each individual uniquely. In addition, Individualized Consideration represents an attempt on the part
of leaders to not only recognize and satisfy their associates' current needs, but also to expand and elevate those needs in an attempt to maximize and develop their full potential. This is one reason why transformational leaders set examples and assign tasks on an individual basis. Transformational leaders also provide opportunities and develop organizational cultures supportive of individual growth.

**Outcomes of Leadership**

The EXTRA EFORT scale identifies leaders who are able to BE GENERATE EXTRA EFFORT in their followers. Extra effort, as one of the direct effects of an effective leadership style, is defined as the wish of followers to strive for superior performance by deploying supplementary efforts, positively exceeding legitimate behavioral expectations of their leaders, their group or their organization. High scorers in this scale amplify the wish of their followers to succeed and to overstep objectives and induce positive supplementary behaviors.

The EFFECTIVENESS scale identifies leaders who are able to BE EFFECTIVE. Effective leaders satisfy the professional of their followers. They also effectively represent the group in front of the higher organizational authority, are effective in meeting organizational objectives and generally generate a higher effectiveness in all the structures they are involved with.

The SATISFACTION WITH LEADERSHIP scale identifies leaders who are able to GENERATE SATISFACTION in their followers. Satisfaction with leadership is measured in the MLQ with only two items and identifies with its higher scores leaders who generate interpersonal satisfaction in their followers and colleagues. These leaders are warm, nurturing, open, authentic, honest persons, with good interpersonal and social skills, capable of developing feelings of satisfaction in their followers.
APPENDIX E

Protocols Used for Survey Administration

Script A: Used by the Class Instructor

For part of our class this afternoon [evening], I have agreed to help administer a survey for a doctoral student in the Leadership Studies program at BGSU. Her name is Brenda Oyer, and for her dissertation she is studying teacher perceptions of their principals’ leadership attributes and behaviors. You are not required to complete the survey, but are encouraged to do so, and if you do choose to participate you will be eligible to win a $5 gift card to one of several restaurants. Even if you are not a teacher, you are also invited to complete the survey. **However, if you have already participated in this study as a student in another course, please do not participate again.**

To ensure the consistency of the survey administration, I’ll be reading from a script as we walk through this process.

First, I will hand out an Informed Consent form which explains the purpose and process of Ms. Oyer’s study. Please read the form carefully. If you have any questions about the study, please raise your hand.* After reading the form, if you wish to participate in the study, please sign your name and date at the bottom of the Informed Consent form, then fill out the Gift Card form that is attached. When everyone is finished with this step, I’ll collect the forms and then we’ll proceed to the survey.

[Hand out Informed Consent forms. After everyone has reviewed and completed the Consent Forms, continue reading as follows.]

Thank you. Next I will hand out the survey and an answer sheet. As you answer the questions to the survey, please make sure that your answers on the answer sheet correspond to the appropriate number on your survey. If you are choosing not to complete the survey, you may sit quietly in your seat.

If you are employed by a public school in Ohio, please be sure to complete the School Typology and School Report Card Grade information on page 1 of the survey. You will use column A under “Identification Number” on the bottom left section of your answer sheet to provide the School Typology information. And you will use column K on the bottom left section of your answer sheet to provide Report Card Grade information.

If you have questions at any time, please raise your hand.*

*Answer questions to the best of your ability. If you are unable to answer a question to the student’s satisfaction, remind them that they may choose to not participate or withdraw their consent to participate.

[When everyone has finished the survey, continue reading as follows.]
Thank you for your participation. I know Ms. Oyer really appreciates your willingness to provide her with data for her dissertation. If any of you are interested in the results of her study, you may contact her at oyerb@bgsu.edu.

Script B: Used by the Principal Investigator

Good afternoon [evening]. My name is Brenda Oyer, and I’m a doctoral student in the Leadership Studies program at BGSU. Dr./Mr./Ms. [name of class instructor] has graciously agreed to allow me to use some of your class time today to administer a survey for my dissertation, which is a study of teacher perceptions of their principals’ leadership attributes and behaviors. You are not required to complete the survey, but are encouraged to do so, and if you do choose to participate you will be eligible to win a $5 gift card to one of several restaurants. **However, if you have already participated in this study as a student in another course, please do not participate again.**

To ensure the consistency of the survey administration, I’ll be reading from a script as we walk through this process.

First, I will hand out an Informed Consent form which explains the purpose and process of my study. Please read the form carefully. If you have any questions about the study, please raise your hand.* After reading the form, if you wish to participate in the study, please sign your name and date at the bottom of the Informed Consent form, then fill out the Gift Card form that is attached. When everyone is finished with this step, I’ll collect the forms and then we’ll proceed to the survey.

[Hand out Informed Consent forms. After everyone has reviewed and completed the Consent Forms, continue reading as follows.]

Thank you. Next I will hand out the survey and an answer sheet. As you answer the questions to the survey, please make sure that your answers on the answer sheet correspond to the appropriate number on your survey. If you are choosing not to complete the survey, you may sit quietly in your seat.

If you are employed by a public school in Ohio, please be sure to complete the School Typology and School Report Card Grade information on page 1 of the survey. You will use column A under “Identification Number” on the bottom left section of your answer sheet to provide the School Typology information. And you will use column K on the bottom left section of your answer sheet to provide Report Card Grade information.

If you have questions at any time, please raise your hand.*

* If a student is not satisfied with the answer to their question, remind them that they may choose to not participate or withdraw their consent to participate.
[When everyone has finished the survey, continue reading as follows.]

Thank you so much for your participation. I really appreciate your willingness to provide me with data for my dissertation. If any of you are interested in the results of this study, you may contact me at oyerb@bgsu.edu.
October 15, 2010

TO: Brenda Oyer
Lead. Studies

FROM: Hillary Harms, Ph.D.
HSRB Administrator

RE: HSRB Project #: H11D047GX2

TITLE: The Relationship Between Principals’ Confidence, Humility and Effectiveness: A Study of Teacher Perceptions

The Human Subjects Review Board (HSRB) has reviewed the requested modifications you submitted for your project involving human subjects. Effective October 15, 2010, the following modifications have been approved:

1. Add the following statement to the consent form and Survey Administration Protocol documents: “If you have already participated in this study as a student in another class, please do not participate again”.
2. Clarified the instructions for completing the school district typeology and school report card items.
3. Modified the survey by re-ordering the demographic questions and altering the wording.

You may proceed with subject recruitment and data collection.

The final approved version of the consent document(s) is attached. The consent document(s) bearing the HSRB approval/expiration date stamp is the only valid version and, if it is a revision to previously approved document(s), supercedes those versions. Copies of the dated document(s) must be used in obtaining consent from research subjects.

If you seek to make any additional changes in your project activities, complete the Request for Modifications/Addendum application and submit it to the HSRB via this office. Please notify me in writing upon completion of your project (or email: hsrb@bgsu.edu).

Good luck with your work. Let me know if this office or the HSRB can be of assistance as your project proceeds.

COMMENTS:
Stamped consent form is coming to you via campus mail.

C: Dr. Patrick Pauken
Appendix B
Informed Consent for Graduate-Level Education Students

Introduction:
Principal Investigator: Brenda Oyer, doctoral candidate, Leadership Studies program at Bowling Green State University.

Advisor: Dr. Patrick Pauken, Associate Professor and Graduate Program Coordinator of the Leadership Studies program in the School of Educational Foundations, Leadership, and Policy.

This research is being conducted for the Principal Investigator's (PI) dissertation, a study of teachers’ perceptions of their principals’ attributes and behaviors as they relate to leader effectiveness. Because your class includes many students who are public school teachers, the PI contacted your instructor, and obtained his/her agreement to make the class available to collect data for the study. Even if you are not a public school teacher, however, you are invited to participate in this study. If you have already participated in this study as a student in another class, please do not participate again.

Purpose: The purpose of this research is to assess teachers’ perceptions of their principals’ attributes, behaviors and effectiveness. In general, there are two primary benefits of this study: (1) it will help fill a gap in the research literature on leadership; (2) it will enhance our knowledge of effective educational leadership. By enhancing our knowledge of effective educational leadership, it may also help current leaders evaluate their own leadership practices and seek to become more effective. It may also provide guidance to those who hire people for leadership positions, for selecting the best candidates. And it may provide guidance for the use of programs designed to promote the development of effective leadership attributes, skills, and behaviors.

If you choose to participate in this study, you will indirectly benefit by contributing to scholarly knowledge related to leadership in your professional field (education). To the extent this study provides insight to current school leaders for self-reflection and improvement, as well as guidance for selecting and/or developing more effective educational leaders, you—as well as future teachers—will benefit from the practice of more effective educational leadership.

The most direct benefit you receive from participating in this survey is the opportunity to win a $5 gift card to a restaurant. If you choose to participate in this study, please complete the attached form with your name and mailing address and indicate which restaurant you prefer. Your name will be entered into a lottery along with other participants. You will have no less than a 1 in 20 chance of winning. If your name is drawn, a $5 gift card for your preferred restaurant will be mailed to you.

Procedure: This study involves completing a brief survey that is expected to take about 20 minutes to complete. The survey includes questions asking for basic demographic information about you and
your principal, a couple of questions about your school, and numerous questions related to your perception of your principals’ attributes and behaviors.

**Voluntary nature of the study:** *Your participation in this study is completely voluntary.* You may decline to participate without penalty. You are also free to withdraw or discontinue your participation at any time without penalty. Although you are strongly encouraged to answer every question on the survey in order to enhance the quality of the study, you may choose to not answer any question you do not feel comfortable answering. Choosing to participate or not participate in this study will not in any way affect your grade or class standing or your relationship with your college/university, your instructor, your place of employment, or your job.

**Confidentiality/Anonymity Protection:** Your responses to the survey questions will be completely confidential. You will not be asked to provide either your name, your principal’s name, your school’s name or your school district’s name on your answer sheet, and no effort will be made to identify you or the name of your principal, school, or school district based on the demographic data you provide. If you agree to participate in this study, you will turn in this consent form and the Gift Card form (both of which include your name) prior to completing the survey. No one, including the PI, will be able to connect your name to your answer sheet. The consent forms and Gift Card forms will be kept in a locked file cabinet separate from the answer sheets. The scanned data will be saved in an electronic database on a password-protected computer. The data will be used for research purposes only. The data will be aggregated for purposes of data analysis and reporting.

**Risks:** There are no known risks to your participation in this study. Any risks of confidentiality breaches have been mitigated as described above.

**Contact Information:**
If you have any questions about this research or your participation in this research, please contact the PI or her advisor. If you wish to be provided with a copy of the consent document (signed or unsigned), please contact the PI. Contact information is listed below:

- Brenda Oyer: 419-308-3191  overb@bgsu.edu
- Dr. Patrick Pauken: 419-372-2550  paukenp@bgsu.edu

You may also contact the Chair, Human Subjects Review Board at 419-372-7716 or hsrb@bgsu.edu, if you have any questions about your rights as a participant in this research.

**Statement of Consent**
I have been informed of the purposes, procedures, risks and benefits of this study. I have had the opportunity to have all my questions answered and I have been informed that my participation is completely voluntary. I agree to participate in this research.

<table>
<thead>
<tr>
<th>Participant Signature</th>
<th>Date</th>
</tr>
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If you choose to participate in this study, THANK YOU for your participation. It is sincerely appreciated!