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The Relationship Between Transformational Leadership and the Emotional and Social Competence of the School Leader

David Saxe

Loyola University Chicago

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THE RELATIONSHIP BETWEEN TRANSFORMATIONAL LEADERSHIP AND
THE EMOTIONAL AND SOCIAL COMPETENCE OF THE SCHOOL LEADER

A DISSERTATION SUBMITTED TO
THE FACULTY OF THE SCHOOL OF EDUCATION
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BY

DAVID SAXE

CHICAGO, ILLINOIS

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perseverance, and caring support. May they be that caring support for each other and those around them as they pursue life-long experiential learning with joy and wonder.
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ABSTRACT

Sustainable school reform efforts are needed to move schools closer toward the ideals of equity, justice and success for every student. The success or failure of a school and its students often hinges on the effectiveness of leadership. Research reveals that transformational school leaders become effective change agents by developing a shared vision for the school, building consensus around key priorities, holding high expectations, providing support, modeling appropriate values and building collaborative cultures and shared leadership. The purpose of this study is to examine the predictive relationship between the emotional and social competence and transformational leadership behaviors of school principals.

Principals participating in the study completed the five transformational subscales of the Multifactor Leadership Questionnaire (MLQ5x) and the Emotional and Social Competency Inventory (ESCI), while their superintendents completed the rater versions of the MLQ and ESCI. The relationship between the transformational scales on the MLQ and scores from the ESCI were calculated using Spearman’s rho coefficients. A Wilcoxon Signed Ranks Test was calculated to determine the significance of difference between the self-assessment and other-rater assessment of transformational leader behaviors and social and emotional competency. A multiple regression analysis was conducted to assess the predictive relationship between the dispositional skills and transformational leadership behaviors of the school principal.
Findings from this study suggest that the ability of the school leader to manage relationships, understand the thoughts, feelings, and perspectives of others, recognize the bigger picture, control disruptive impulses and be flexible in the face of change predicts behaviors that can lead to meaningful reforms efforts and positive school outcomes. Given that these skills can be taught and learned across the lifespan, research findings offer implications for leadership preparation and training programs, administrator evaluation, professional development, and hiring practices.

The small sample size of the current study impacts the generalizability and statistical validity of the conclusions. Future research should include a larger sample of principals from a variety of settings. In this research, a 360-degree assessment of the principals’ transformational leader behaviors and emotional and social competencies should be ascertained from supervisors, colleagues, teachers, staff and students.
CHAPTER I
INTRODUCTION

Sustainable school reform efforts are needed to move schools closer toward those ideals of equity, justice and success for every student. “School reform in the 21st century requires leaders to transform schools into autonomous, systems-thinking organizations, revolving around professional learning communities that can embrace change and create a high performing learning environment for students and teachers (Moore, 2009a, p. 20). According to Hargreaves and Fink (2003; 2005), sustainable leadership helps create learning, promises long-term success of the organization, distributes leadership, works toward social justice, develops resources, embraces diversity, and commits to actions that benefit the school and its students.

Among the myriad leadership theories posed and studied since the early part of the 20th century, transformational leadership relates directly in many respects to the need for school reform sought by No Child Left Behind (Moore & Rudd, 2006). Beginning in the early 1990s, the challenges of school restructuring brought rise to developing ideas about transformational forms of leadership as perhaps more critical or valued compared to the more traditional view of the administrator as instructional leader (Leithwood, 1992, 1994). This was especially true for those in senior administrative roles including principal (Leithwood, 1996).
According to Hoy and Miskel (2001), transformational leadership is what teachers and other staff perceives when they think about their vision of the ideal leader. Transformational school leaders persuade, inspire, and motivate others to achieve results. This occurs not through the provision of rewards and consequences (transactional), but by tapping into the intrinsic values of staff and shaping those to be consistent with the school’s mission, vision and values (Lashway, cited in Smith & Piele, 2006 p. 90).

The transformational school leader provides a mission centered focus on setting directions, a performance centered focus on developing people, and a culture centered focus on redesigning the organization (Hallinger, 2003’ Lashway, cited in Smith & Piele, 2006; pp. 93-94; Leithwood, 1994; Leithwood & Jantzi, 2006; Marks & Printy, 2003). Contained within these categories are nine specific dimensions with multiple, more detailed leader practices embedded therein. Justification for these categories, dimensions, and practices is offered through findings from previous research on school leadership (Leithwood, 1994, 1995; Leithwood et al., 1996; Leithwood & Jantzi, 1990; Leithwood, Jantzi, & Fernandez, 1994; Leithwood, Jantzi, & Steinbach, 1999).

This research reveals that transformational school leaders develop a shared vision for the school, build consensus around key priorities, hold high expectations, provide support, model appropriate values and build collaborative cultures and shared leadership. More specifically, transformational school leadership has positive effects on school culture (e.g., Barnett & McCormick, 2004), teacher commitment, teacher job satisfaction (e.g., Bolger, 2001), changed teacher practices (e.g., Leithwood et al., 2004), planning and strategies for change (e.g., Leithwood, Aitken, & Jantzi, 2001), pedagogical or
instructional quality, (e.g., Marks & Printy, 2003), organizational learning (e.g., Silins, Mulford, & Zarins, 2002), collective teacher efficacy (e.g., Ross, 2004), and student engagement (e.g., Leithwood et al., 2003). Findings on the direct and indirect impact of transformational leadership on student achievement are mixed with studies reporting significant relationship between the former and some measure of the latter (Leithwood & Jantzi, 2005).

According to Leithwood and his colleagues (2004), only classroom instruction ranks higher than leadership among school-related factors for increasing student achievement. Others support this position in the literature (Marzano, Waters, & McNulty, 2005). Leadership toward school reform, however, does not come without its costs. Emotion words like turmoil, resistance, stress, anger, and frustration often emerge in the literature to describe common reactions to the change process (Blankstein, 2004; Dufour, Dufour, & Eaker, 2008). Moore (2009) suggests that emotional intelligence is a requisite skill set for a principal attempting to restructure and reorganize the school system. Where emotions commonly run high in an environment of reform, employing emotional intelligence and developing relationships is the responsibility of all principals (Fullan, 2001).

The dimensions of transformational leadership theory incorporate many of the characteristics of emotional intelligence. Outside the field of education, several studies reported a relationship between emotional intelligence and transformational leadership. For example, Palmer, Walls, Burgess, and Stough (2001) found that an underlying competency of transformational leadership is the person’s ability to manage and monitor
the emotions of one’s self and others. Sivanathan and Fekken (2002) found that their followers perceive leaders with higher emotional intelligence as more effective and transformational. Ashkanasy and Tse (2000) revealed that transformational leaders show emotions to elicit positive thinking among followers about new ideas and a developing vision. In particular, this research showed that leaders elicit optimism through the support offered. Without this support employees can become pessimistic, leading to less effort and a decrease in performance (Manion, 2000). Through the use of influence, transformational leaders motivate followers to actively pursue long-term goals and strategic objectives (Berson et al., 2001).

In a study published in the *Journal of Business and Psychology* (Mandell & Pherwani, 2003), researchers found through regression analysis of self-report data that emotional intelligence scores could predict the transformational behaviors of the leader. In their conclusion, the authors suggested future research that assesses other-rater’s perceptions of the transformational behaviors of the leader.

Limited research in educational leadership supports the link between the emotional intelligence and transformational behaviors of the school leader. A review of the literature revealed just two recent studies addressing the relationship between dispositions and leadership behaviors of professionals in a school leadership position. In a qualitative study (Hinton, 2008), two groups of principals were examined. One group of principals worked at schools that made Adequate Yearly Progress while the other group of principals worked at schools that did not. The study included three research questions including: How do leaders’ conversations about trust vary with leader self-awareness? In
what ways do these distinctions in language identify emergent themes about self-awareness and how it is manifested in conversations about trust? How does student learning as measured by performance on the Illinois Standards Achievement Test vary with the development of leader self-awareness?

The findings showed that principals working at schools that made AYP demonstrated more self-awareness, social awareness, and relationship management as compared to their counterparts at schools that did not make AYP. Principals in schools that made AYP recognized an acknowledgement of distrust as a normal phenomenon and one that impacts staff assessment of the competence, integrity, benevolence, and professionalism of the leader. At schools that made AYP, principals showed higher emotional intelligence when faced with the betrayal of trust and its restoration. Finally, principals from schools that made AYP described competencies from several emotional intelligence domains when discussing their own professional expertise.

In 2008, Hackett and Hortman measured the relationship between the transformational leadership behaviors of assistant principals to their set of self-reported emotional and social competencies. Findings showed a correlation between competencies in each of the four emotional intelligence domains and one or more of the transformational leadership scales including, Idealized Influence, Inspirational Motivation, Intellectual Stimulation and Individual Consideration. More specifically, this study showed that more competencies in the social and emotional competence domains of social awareness and relationship management correlated with transformational leader behaviors as compared to self-awareness and self-management. In their conclusion, the
authors of this study pointed to the need for future research with school principals from a variety of settings. They further suggested that beyond self-report of principals alone, measures should be administered to the principal’s supervisor so that the competencies and behaviors of the principal can be better understood from an external perspective.

This research is significant because it seeks to understand the dispositional antecedents of transformational leadership. This was accomplished through the use of a demographic survey and the completion of two instruments by principals and their superintendents. Those instruments are the self and rater versions of both the MultiFactor Leadership Questionnaire (MLQ 5X Short) and the Emotional and Social Competence Inventory (ESCI 3.0).

To identify specific emotional and social competencies that most heavily influence the transformational leader behaviors of school principals would contribute to research in field of educational leadership. “If emotional intelligence scores can predict transformational leadership, organizations may find emotional intelligence measures to be valuable tools in the hiring, promotion and development of organizational leaders” (Mandell & Pherwani, 2003, p. 400).

**Purpose**

The purpose of this study is to examine the predictive relationship between the emotional and social competence and transformational leadership behaviors of school principals.
Research Questions

This study will seek to answer the following research questions:

1. What is the relationship between the principal’s self-assessment of transformational leader behaviors and the principal’s emotional and social competencies?

2. What is the relationship between the superintendent’s assessment of the principals’ transformational leader behaviors and the superintendent’s assessment of the principal’s emotional and social competencies?

3. What is the relationship between the principal’s self-assessment of transformational leader behaviors relative to the superintendent’s assessment of the principal’s transformational leader behaviors?

4. What is the relationship between the principal’s self-assessment of emotional and social competency relative to the superintendent’s assessment of the principal’s emotional and social competency?

Null Hypotheses

This study explores several null hypotheses. Those hypotheses are articulated as follows.

Principal’s Self-Assessment of Transformational Leader Behaviors and Emotional and Social Competencies

1a. There is no relationship between the use of Attributed Idealized Influence as measured by the MLQ (5X-Short) and the emotional and social competencies of principals as measured by the ESCI (Version 3.0).
1b. There is no relationship between the use of Behavioral Idealized Influence as measured by the MLQ and the emotional and social competencies of principals as measured by the ESCI.

1c. There is no relationship between the use of Inspirational Motivation as measured by the MLQ and the emotional and social competencies of principals as measured by the ESCI.

1d. There is no relationship between the use of Intellectual Stimulation as measured by the MLQ and the emotional and social competencies of principals as measured by the ESCI.

1e. There is no relationship between the use of Individualized Consideration as measured by the MLQ and the emotional and social competencies of principals as measured by the ESCI.

1f. There is no relationship between any of the dimensions of Transformational Leadership as measured by the MLQ and any combination of the competencies or clusters of competencies as measured by the ESCI.

Superintendent’s Assessment of the Principals’ Transformational Leader Behaviors and Emotional and Social Competencies

2a. There is no relationship between the superintendent’s assessment of the principal’s use of Attributed Idealized Influence as measured by the MLQ and superintendent’s assessment of the principal’s emotional and social competencies as measured by the ESCI.
2b. There is no relationship between the superintendent’s assessment of the principal’s use of Behavioral Idealized Influence as measured by the MLQ and superintendent’s assessment of the principal’s emotional and social competencies as measured by the ESCI.

2c. There is no relationship between the superintendent’s assessment of the principal’s use of Inspirational Motivation as measured by the MLQ and superintendent’s assessment of the principal’s emotional and social competencies as measured by the ESCI.

2d. There is no relationship between the superintendent’s assessment of the principal’s use of Intellectual Stimulation as measured by the MLQ and superintendent’s assessment of the principal’s emotional and social competencies as measured by the ESCI.

2e. There is no relationship between the superintendent’s assessment of the principal’s use of Individualized Consideration as measured by the MLQ and superintendent’s assessment of the principal’s emotional and social competencies as measured by the ESCI.

2f. There is no relationship between the superintendent’s assessment of the principal’s use of any of the dimensions of Transformational Leadership as measured by the MLQ and the superintendent’s assessment of the principal’s use of any combination of the competencies or clusters of competencies as measured by the ESCI.
Principals’ Self-Assessment of Transformational Leader Behaviors Relative to the Superintendent’s Assessment of the Principals’ Transformational Leader Behaviors

3a. There is no difference between self-assessment and other-rater assessment of the use of Attributed Idealized Influence as measured by the MLQ.

3b. There is no difference between self-assessment and other-rater assessment of the use of Behavioral Idealized Influence as measured by the MLQ.

3c. There is no difference between self-assessment and other-rater assessment of the use of Inspirational Motivation as measured by the MLQ.

3d. There is no difference between self-assessment and other-rater assessment of the use of Intellectual Stimulation as measured by the MLQ.

3e. There is no difference between self-assessment and other-rater assessment of the use of Individualized Consideration as measured by the MLQ.

Principals’ Self-Assessment of Emotional and Social Competency Relative to the Superintendent Assessment of the Principals’ Emotional and Social Competency

4a. There is no difference between self-assessment and other-rater assessment of the principals’ self-awareness as measured by the ESCI.

4b. There is no difference between self-assessment and other-rater assessment of the principals’ self-management as measured by the ESCI.

4c. There is no difference between self-assessment and other-rater assessment of the principals’ social awareness as measured by the ESCI.

4d. There is no difference between self-assessment and other-rater assessment of the principals’ relationship management as measured by the ESCI.
Rationale for the Research

The success or failure of a school and its students often hinges on the effectiveness of leadership. Leadership is a catalyst for reform efforts by involving all stakeholders in student achievement and offering all students opportunities for engagement and success (Hopkins, 2006). From this perspective the leader has a moral obligation to pursue social justice for all students. Among the myriad leadership theories posed and studied since the early 1900’s transformational leadership relates directly in many respects to the need for school reform sought by No Child Left Behind. Through Idealized Influence, Inspirational Motivation, Intellectual Stimulation, and Individualized Consideration, transformational leaders create a followership that views work from a new perspective, commits to the vision and mission of the organization, and reaches its fullest potential.

A growing body of research considers the antecedents to transformational leadership. Among these studies there is evidence to suggest that the emotional and social competencies of the leader are related to their ability to contribute positively to the transformation of an organization. In the school setting, research with assistant principals showed a clear relationship between many of the emotional and social competencies with the transformational leader behaviors that facilitate real, meaningful and lasting school reform (Hackett & Hortman, 2008).

Many school districts today face the challenge of recruiting, hiring, developing and retaining quality candidates for the role of school principal (Gaussel, 2007). “Today a principal needs to be a teacher, a curriculum expert, an assessment expert, a bringer-
together, an authority, a public relations and communication expert, a financial analyst, and the guardian of legality and fairness” (Gausell, 2007, p. 7). Some research suggests that the lack of quality applicants for the role of principal is related to inadequate training that is too disconnected from actual practice and empirical knowledge (Levine, 2005).

In response to requests to revisit educational leadership standards, the National Policy Board for Educational Administration (NPBEA) updated the 1996 ISLLC standards with the publication of Educational Leadership Policy Standards: ISLLC 2008 (Wilhoit, 2008). This work was based upon the growing body of research on education leadership related to characteristics of good leadership, the principal’s role in increasing student achievement, and best practices for increasing the national pool of qualified and effective leaders. The result was a compilation of six standards for school leaders to promote the success for every student. The Educational Leadership Policy Standards: ISLLC 2008 standards are as follows:

1. Setting a widely shared vision for learning;
2. Developing a school culture and instructional program conducive to student learning and staff development;
3. Ensuring effective management of the organization, operation, and resources for a safe, efficient, and effective learning environment;
4. Collaborating with faculty and community members, responding to diverse community interests and needs, and mobilizing community resources;
5. Acting with integrity, fairness, and in an ethical manner;
6. Understanding, responding to, and influencing the political, social, legal, and cultural contexts.

Embedded within each of the standards are various functions to be performed by the school leader. For example, within each of the six standards there are functions such as; collaboratively develop and implement a shared vision and mission, promote continuous and sustainable improvement, create personalized and motivating learning environments for students, promote and protect the welfare and safety of students and staff, build and sustain positive relationships with families and caregivers, and promote social justice and ensure that individual student needs inform aspects of school.

As one reads through the ISLLC standards and functions it becomes clear that words like collaboratively develop, create, build, sustain, and promote, imply the need for leadership behaviors that transform the school culture. Further, language that speaks to the need for the leader to nurture, advocate, build relationships, promote social justice, and model principles of self-awareness, highlights the implied connection of these transformational leadership behaviors to the emotional and social competencies of the school leader. These important connections already have been drawn in literature related to the relationship between emotional and social learning, the preparation of teachers, and the Illinois Teacher Standards (Flemming & Bay, 2004).

“Training can enhance the personal competencies so vital for effective leadership in today’s schools, but only if it is appropriately designed and implemented” (Cherniss, 1998, p. 28). One such example is Star Factor Coaching (Patti & Tobin, 2006). This program, being piloted in New York City schools, coaches principals to become more
socially and emotionally competent. Many principals need training and support to manage emotion and conflict (Patti, 2007). Further, this training and education is essential to develop school leaders who are more equipped to lead change. “Emotional intelligence is important for school administrators and it is time to implement training programs for school administrators to develop these skills to deal with emotions associated with school reform” (Moore, 2009a, pp. 24).

Significance of Study

The State of Illinois has been at the forefront nationally in identifying the development of emotional and social learning competencies in students as critical toward producing learners ready to lead productive lives as good citizens. These efforts formally began at the State level with the passage of the Illinois Children’s Mental Health Act of 2003 Public Act 93-0495 (SB 1951). Section fifteen of the Act states specifically that all public schools in Illinois must teach and assess emotional and social competencies identified in the Illinois State Board of Education Social and Emotional Development Learning Standards.

Research in the area of social emotional learning is advanced by the Collaborative for Academic, Social and Emotional Learning (CASEL). According to CASEL (Devaney et al., 2006), “social and emotional learning (SEL) is the process of acquiring the skills to recognize and manage emotions, develop caring and concern for others, establish positive relationships, make responsible decisions, and handle challenging situations effectively.” Successful and sustained SEL programming requires the school leader to, “make SEL a priority by creating the ‘Big Idea’ of SEL and articulating it to the entire school
community, prepare staff for change and be supportive throughout the process, model the emotional and social competencies he or she expects students to learn and teachers to teach and model, and advocate and be a visible and vocal supporter of SEL to the entire school community” (Devaney et al., 2006). Transformational school leaders accomplish these second-order changes by setting the direction, developing people, and redesigning the organization (Leithwood et al., 2004).

This research is significant because it seeks to understand the dispositional antecedents of transformational school leadership. The identification of specific social and emotional competencies that most heavily influence the transformational leader behaviors of school principals would contribute to research in the field of educational leadership. Given research showing that social and emotional competencies can be taught and learned over the lifespan (Goleman, 1998b, 2001), being able to drill down to the specific skills and competencies that promote transformational leadership has tremendous implications for school reform efforts. “If emotional intelligence scores can predict transformational leadership, organizations may find emotional intelligence measures to be valuable tools in the hiring, promotion and development of organizational leaders” (Mandell & Pherwani, 2003, p. 400).

Methodology

School principals and their superintendents were selected for participation in the study. These professionals were chosen from a database of schools participating in a grant through the Illinois Children’s Mental Health Partnership, the Collaborative for Academic Social and Emotional Learning (CASEL) and the Illinois State Board of
Education (ISBE). Seventy-six principals were available for participation in the study. The demographic data from the participating principals, superintendents, and schools was gathered and described.

Principals participating in the study completed the five transformational subscales of the Multifactor Leadership Questionnaire (MLQ5x), while the superintendents completed the five transformational subscales of the rater-version of the MLQ. Principals also completed the Emotional and Social Competency Inventory (ESCI), a measure of 12 competencies organized into four emotional intelligence domains. Superintendents completed the rater version of the ESCI. Principals were asked to share demographic information such as age, gender, years of administrative experience, and highest leadership degree attained. Names and other identifying information were not requested. A stamped, self-addressed envelope was included in the mailing for return of completed materials.

Means and standard deviations were calculated for the demographic data, the transformational sub-scales of the MLQ and the emotional and social competencies of the ESCI. The relationship between the five transformational scales on the MLQ and each of the 12 emotional and social competency scores from the ESCI were calculated using Spearman’s rho coefficients. A Wilcoxon Signed Ranks Test was calculated to determine the significance of difference between the self-assessment and other-rater assessment of transformational leader behaviors and social and emotional competency. A multiple regression analysis was conducted to assess the predictive relationship between the dispositional skills and transformational leadership behaviors of the principals sampled.
Summary

This chapter provided an introduction to the research study. The purpose of the study was stated along with research questions and null hypotheses. A brief overview of the literature offered evidence for the significance of the study. The proposed methodology and potential limitations also were included. In following chapter a comprehensive review of related literature presents a basis for the purpose of the study and the rationale for exploration of the relationship between the emotional and social competency and transformational leader behaviors of the principals sampled.
CHAPTER II

REVIEW OF LITERATURE

Historical Perspective of Transformational Leadership

Leadership is a universal phenomenon observed across every human civilization and in many animal species (Bass, 1997; Murdock, 1967). Dating back to middle of the twentieth century, many anthropologists held the position that social organization and leadership is found in all vertebrates living in groups (Allee, 1951). Representations of leadership more than 5000 years old have been discovered among Egyptian hieroglyphs. Down through the centuries, great minds of the time such as Confucious, Homer and Plato wrote eloquently about the importance of leadership (Bass & Bass, 2008). Though not a voice for social justice in 1513, Machiavelli wrote, “there is nothing more difficult to take in hand, more perilous to conduct, or more uncertain in its success, than to take the lead in the introduction on a new order of things” (Machiavelli, 1513, 1952, 1961).

Leadership has many definitions. A review of 587 publications, revealed 221 different classifications of leadership (Rost, 1993). According to Bass (2008), “Leadership is an interaction between two or more members of a group that often involves a structuring or restructuring of the situation and of the perceptions and expectations of the members” (p. 25). The implication here is that effective leaders are agents of change.
Impetus for the rise of transformational leadership theory in the 1970s came from two economic, social and geopolitical developments (Simic, 1998). Following more than 25 years of post-World War II stability, rapid technological changes, growing competition from a developing world economy, and the changing demographic structures created instability that required significant organizational changes in many corporations. What ensued from these early structural changes was the erosion of the social contract of company loyalty for long-term employee service (Griffin, 2007). When downsizing and structural reorganization became the norm among corporations in the 1980s, the benefits of improved profit margins were met with costs related to a disenfranchised group of followers who felt increasingly dissatisfied and powerless (Conger, 1999). During this time, the challenge for organizations slowly shifted to a focus on processes that facilitated real transformational change centering on the development of employee morale, motivation, and commitment to the utilitarian ethic of the greater good. It is from this shift that the study of transformational leadership was born.

Early Conceptualization of Transformational Leadership

The leader as change agent was first described as transformational leadership by Downton (1973, as cited in Barnett, McCormick & Conner, 2001) to explain differences among ordinary, rebellious, reform, and revolutionary leaders. The concept later was expanded by James McGregor Burns (1978), whose seminal work on political leaders established the transforming leader as one who engages with followers in an effort to transcend self-interest for the sake of the team. The transformational leader focuses on higher order needs such as esteem, self-fulfillment and self-actualization as identified in
Maslow’s hierarchy of needs (1943). Through this form of leadership there is a raising awareness about and attention to specific outcomes. This awareness and attention foster development about new ways of thinking and behaving that lead to the achievement of desired outcomes (Barnett, McCormick & Conners, 2001; Gellis, 2001; Judge & Piccolo, 2004). Transformational leaders move followers beyond their own needs through the sharing of values such as altruism, supportiveness, service, honesty and fairness (Engelbrecht & Murray, 1995).

Based on this early work, transformational leadership was seen as falling at the opposite end of a continuum from transactional leadership. Burns differentiated transforming leaders from ordinary leaders who employ a transactional approach by commonly exchanging rewards for services rendered. More specifically, Burns identified transactional leaders as managers who recognize what subordinates want, and get it for them should employee performance warrant the reward. Rather than promoting change within an organization, transactional leaders seek to maintain stability by encouraging consistent performance to meet agreed upon goals (Bryant, 2003; Lussier & Achua, 2004; Bryant, 2003). This encouragement comes from the use of rewards and punishments that serve as economic exchange transactions (Barnett, 2003; Gellis, 2001). Although many leaders can be seen as both transformational and transactional in their approach, according to Bass (1985), “the leadership of great men (and great women) of history has usually been transformational, not transactional” (p. 26).
Transformational Leadership Influence on Followers

Over the past two decades, transformational leadership has emerged as one of the most widely researched concepts in the field of organizational psychology (Sivanathan & Fekken, 2002). In the workplace, transformational leaders achieve higher levels of success along with follower ratings of greater satisfaction, increased motivation, improved productivity and performance, and extra effort (Bass, 1997; Dasborough & Ashkanasy, 2002; Dumdum, Lowe, & Avolio, 2002; Keller, 1995; Masi & Cooke, 2000; McColl-Kennedy & Anderson, 2002; Pirola-Merlo, Hartel, Mann & Hirst, 2002; Seltzer & Bass, 1990). Top performing managers are seen as more transformational as compared to underperforming peers (Hater & Bass, 1988) whose low levels of transformational leadership increased employee frustration and reduced performance (McColl-Kennedy & Anderson, 2002). In two studies with diverse samples, Bono and Judge (2003) found that followers of transformational leaders, as compared to transactional leaders, viewed their work as more important and consistent with their values. Other research suggests that followers of transformational leaders see higher purpose in their work.

The transformational leader stimulates an interest in considering work from a new and fresh perspective (Bass & Avolio, 1994). In several studies assessing leader performance through survey of followers, transformational leaders achieve their results in numerous ways (Bass & Avolio, 1993a, 1994; Bass, 1985; Hater & Bass, 1988; Howell & Avolio 1993; Lowe et al., 1996). These leaders inspire others through commitment to colleagues, perseverance, risk-taking and achievement oriented focus. There is a genuine belief in continuous improvement and the validity of employee needs. Encouragement
centers on thinking about new perspectives and even the most successful approaches, strategies and norms are questioned on an ongoing basis. Last, transformational leaders use prior successes to build trust and confidence that obstacles will be overcome through hard work and sacrifice.

The Bass Augmentation Model of Transactional and Transformational Leadership

As compared to Burns who viewed transformational and transactional leadership as dimensional constructs at opposite ends of the same continuum, Bass (1985) saw the constructs as complementary of one another (Moore & Rudd, 2006). Leaders, according to Bass (1997), are most effective when they exhibit both transformational and transactional leadership behavior.

In the Bass model, transactional leadership is broken down into three dimensions including contingent reward, management by exception active, and management by exception passive (Bass, 1985). Through contingent reward the transactional leader is dependent upon the power or authority of the leader to reinforce associates for successful completion of assigned tasks. Through the process of negotiation, leaders provide rewards in various forms including material goods or symbols that may be immediate or delayed, partial or whole, implicit or explicit (Bass, 1997). According to Bass (1997), transactional leaders “clarify expectations, exchange promises and resources for support of the leaders, arrange mutually satisfactory agreements, negotiate for resources, exchange assistance for effort, and provide commendations for successful follower performance.” From this perspective, contingent reward is a constructive transaction (Bass & Bass, 2008).
Research shows that contingent reward has two distinct aspects. In two studies (Antonakis, 2001; Goodwin, Wofford, & Whittington, 2001) contingent reward was transformational when there were psychological rewards such as recognition and praise but transactional when involving material reinforcement through rewards such as increased pay.

According to Bass (1997), the second dimension of transactional leadership is active management by exception. When using this transactional style the leader monitors follower performance and takes corrective action when performance deviates from the norm or standard expectations (Antonakis, Avolio & Sivasubramaniam, 2003; Bass 1997; Bass & Bass, 2008). The difference between active management by exception and the third dimension of transactional leadership, passive management by exception, involves the timing of the intervention (Howell & Avolio, 1993). In either case, managers engage in transactions that focus on mistakes or delay decisions (Barbuto, 2005; Barnett, McCormick & Conners, 2001). In the active process, the manager looks for deviations from rules and standards and acts before problems become serious, while in the passive, action does not occur until problems emerge (Barbuto, 2005; Bass, Avolio, Jung & Berson, 2003; Judge & Piccolo, 2004). Studies of management by exception show that the behaviors fall into one of three categories including autocratic, status quo maintenance and overregulation (Gray, 1998).

The use of transactional leadership often leads to unwanted results where workers tend to show disinterest in performing beyond levels specified by their job description or contract (Bryant, 2003). Although contingent reward can positively impact followers’
performance and satisfaction (Podsakoff & Schriesheim, 1985), management by exception tends to show negative impact on these indicators especially when the leader passively waits for problems to arise (Waldman, Atwater & Bass, 1992). While first order change of degree can be accomplished through the transactional relationship between leader and follower, the perspective shift of higher order change requires something different (Bass & Avolio, 2004). In this sense, transformational leadership does not replace but instead augments transactional leadership in that it compels followers to extend beyond expectations (Bass, 1998).

According to Moore and Rudd (2006), transformational leaders motivate those around them to achieve greater outcomes than were originally intended or expected. Transformational leaders go beyond exchanging rewards for performance by developing, stimulating and inspiring followers to adapt and align self-interests with the mission and vision of the organization (Howell & Avolio, 1993). In the Bass model of leadership, four dimensions comprise transformational leadership behavior (Bass & Avolio, 1993) including Idealized Influence, Inspirational Motivation, Intellectual Stimulation and Individualized Consideration.

Leaders demonstrate Idealized Influence with displays of conviction, emphasis on trust, commitment, purpose and resolution even in the face of difficult challenges (Bass, 1997). When leaders operate out of deeply held personal values based on justice and integrity (Humphreys & Einstein, 2003), the developing relationship leads to strengthening of the followers’ goals and beliefs (Modassir & Singh, 2008). Idealized influence is categorized in two distinct ways (Antonakis, Avolio, & Sivasubramaniam,
2003). When followers perceive the leader as powerful, confident, ethical and consistent in a focus on higher-order ideals, this is referred to as idealized influence (attributed). Idealized influence (behavior) is characterized as the charismatic actions that elicit alignment between leader-follower values, beliefs and sense of mission (Antonakis, Avolio, & Sovasubramaniam, 2003).

Leaders provide Inspirational Motivation when they demonstrate enthusiasm, encouragement, and consistency in their communication of high standards and an appealing vision of the future (Bass, 1997). As a companion to charisma (Conger & Kanungo, 1988), the inspirational leader excites and transforms employees to a mindset that greatness is attainable (Modassir & Singh, 2008). Whereas Idealized Influence refers to motivating individuals, Inspirational Leadership speaks to the motivation of an entire organization (Hay, 2007) by communicating high expectations and increasing team spirit and enthusiasm (Northouse, 2001).

In addition to building trust and inspiring followers, transformational leaders also provide Intellectual Stimulation for the values and big ideas of others (Bass & Avolio, 2004). Through this stimulation norms of operation are continually reviewed and questioned so that new and creative methods for accomplishing the mission can be explored (Barbuto, 2005). As it relates to the trust established through idealized influence, followers are empowered to craft and propose new and even controversial ideas without fear of ridicule (Stone, Russell & Patterson, 2003). Followers are moved out of the conceptual ruts through a reformulation of the problem (Bass & Bass, 2008).
The fourth dimension of transformational leadership is Individualized Consideration, which involves considering each person’s individual needs, abilities and aspirations (Bass, 1997; Bass & Bass, 2008). The transformational leader who uses Individualized Consideration listens, advises, teaches and coaches to further develop followers. People are treated differently and individually based upon their talents, knowledge and experience (Shin & Zhou, 2003). The individually considerate leader attends to differing needs for growth and achievement by personalizing interactions, encouraging two-way communication, delegating tasks to develop shared leadership and recognizing qualities in each person regardless of cultural differences (Bass & Bass, 2008).

This section summarized the dimensions of transactional and transformational leadership as outlined by Bass in his model of leadership. In order to effectively measure the components of transactional and transformational leadership, Bass and his colleagues developed the Multi-factor Leadership Questionnaire (MLQ). The following section describes that instrument and its history in greater detail.

**The Multifactor Leadership Questionnaire (MLQ5x)**

Bernard Bass was the first scholar to construct a measurement instrument from the transformational leadership model (Conger, 1999). The original conceptualization of the MLQ included 142 items based upon information gather from executives who were asked to describe leaders who influenced them and encouraged others to look beyond their self-interests to that which was good for the group (Avolio, Bass & Jung, 1999). Items were then sorted and eliminated based upon inter-rater agreement for the placement
of the items into one of three categories, transformational, transactional or contingent reward. The final list of 73 items was evaluated by US Army colonels and factor analyzed to reveal three transformational factors (charisma-inspirational, Intellectual Stimulation, Individualized Consideration), two transactional factors (contingent reward, active management by exception) and one non-leadership factor. The non-leadership factor in the original model, called passive-avoidant leadership, referred to those who either react only after problems become serious or avoid making decisions all together.

The MLQ as a 360-degree instrument has undergone several revisions since the original introduction of the instrument. These revisions were undertaken to better measure the component factors and to address psychometric concerns arising from research using the instrument (Antonakis et al., 2003; Avolio, Bass & Jung, 1995). The current version of the instrument, the MLQ5x contains 45 items. Of these 45 items, 36 items generate information about nine leadership factors and three leadership outcomes (Muenjohn & Armstrong, 2008). The remaining nine items assess three leadership outcome scales. In a shift from the first version of the MLQ, subsequent versions renamed Passive-Avoidant leadership, referring to it instead as Laissez-Faire Leadership and added a scale referred to as Passive Management-by-Exception. Where the Laissez-faire leader or non-leader avoids addressing conflicts or making decisions, the leader using Passive Management-by-Exception intervenes only when problems arise (Muenjohn, & Armstrong, 2008). Table 1 outlines the MLQ leadership constructs (Weinberger, 2004).
Table 1

Constructs, Factors and Scales of the MLQ5x

<table>
<thead>
<tr>
<th>Leadership Construct</th>
<th>Factor</th>
<th>Scale (Number of Items/Scale)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transformational Leadership</td>
<td>Intellectual Stimulation</td>
<td>Intellectual Stimulation (4)</td>
</tr>
<tr>
<td></td>
<td>Individualized Consideration</td>
<td>Individualized Consideration (4)</td>
</tr>
<tr>
<td></td>
<td>Idealized Influence</td>
<td>Idealized Influence-Behavior (4)</td>
</tr>
<tr>
<td></td>
<td>Idealized Influence-Attributed</td>
<td>Idealized Influence-Attributed (4)</td>
</tr>
<tr>
<td></td>
<td>Inspirational Motivation</td>
<td>Inspirational Motivation (4)</td>
</tr>
<tr>
<td>Transactional Leadership</td>
<td>Contingent Reward</td>
<td>Contingent Reward (4)</td>
</tr>
<tr>
<td></td>
<td>Management-by-Exception</td>
<td>Management-by-Exception-Active (4)</td>
</tr>
<tr>
<td></td>
<td>Management-by-Exception-Passive</td>
<td>Management-by-Exception-Passive (4)</td>
</tr>
<tr>
<td>Laissez-Faire Leadership</td>
<td>Laissez-Faire</td>
<td>Laissez-Faire (4)</td>
</tr>
<tr>
<td>Leadership Outcomes</td>
<td>Satisfaction</td>
<td>Satisfaction (2)</td>
</tr>
<tr>
<td></td>
<td>Extra Effort</td>
<td>Extra Effort (3)</td>
</tr>
<tr>
<td></td>
<td>Effectiveness</td>
<td>Effectiveness (4)</td>
</tr>
</tbody>
</table>

Research using higher order factor analysis reveals an order of the factors from highest to lowest in terms of activity, effectiveness, extra effort and satisfaction with leadership (Avolio & Bass, 1990; Bass, 1997). In each case the order is as follows: Transformational Leadership, Contingent Reward, Active Management by Exception, Passive Management by Exception, and Laissez-Faire Leadership. Similar patterns have been replicated in countries outside of the United States including India, Spain, Japan, China, Austria, Canada, New Zealand, Belgium, Germany, Italy and elsewhere (Bass
In a meta-analysis of 87 leadership studies, Judge and Piccolo (2004) found support for the augmentation hypothesis in that transformational leadership added to the effects beyond transactional and laissez-faire leadership. Findings from this meta-analysis support the validity of transformational leadership along with contingent reward leadership with the former in particular showing generalization across many settings. Finally, tests of the multivariate relationships between transformational and transactional leadership were highly related to one another, as consistent with the belief by Bass that these factors are distinct but not mutually exclusive from one another (Yukl, 1999).

Transformational Leadership in the School Setting

As summarized above, research supporting the effectiveness of transformational leadership in the change process has accumulated across many fields in business and industry since the late 1980s. Beginning in the early 1990s, the challenges of school restructuring brought rise to developing ideas about transformational forms of leadership as perhaps more critical or valued compared to the more traditional view of the administrator as instructional leader (Leithwood, 1992, 1994). This was especially true for those in senior administrative roles including principal (Leithwood, 1996).

Instructional leadership research in the early 1980s identified effective schools with principals who tended to demonstrate strong, directive leadership focused on curriculum and instruction (Leithwood & Montgomery, 1986). According to Hallinger (2003) the instructional leader defines the school’s mission, manages the instructional program, and promotes a positive school-learning climate.
Several criticisms of instructional leadership have emerged in the literature. Some have suggested that the top-down directive approach emphasized by instructional leadership is too prescriptive. “The traditional top-down linear conceptions of leadership and management and their influence on teaching and learning have become inappropriate” (Dimmock, 1995, p. 295). Another challenge of the instructional leader model is that quite often the principal is not the content expert relative to the teachers he or she supervises (Hallinger, 2003; Stewart, 2006). This is further complicated by the reality that ultimate authority often lies beyond the principal serving as middle manager, with senior-level administrators at the district office having the ultimate say in decision-making. Instructional leadership and its hierarchical orientation found further conflict in the early 1990s with school restructuring efforts and the movement to empower teachers within a democratic and participative organization (Marks & Printy, 2003).

These school restructuring efforts have brought innumerable challenges. These include uncertainty about educational ends and means; attention to organizational support of changes in core technology and its use as a component of the educational process; increasingly large and pedagogically complex school organizations especially at the secondary level; and efforts to professionalize teaching by creating shared instructional leadership within teacher teams (Jantzi & Leithwood, 1996). Because of these challenges, educational leadership theorists and researchers in the early 1990s began advocating for a shift from instructional to transformational forms of leadership (Leithwood, 1992, 1994).

Several criteria are useful to understand the conceptual distinctions between instructional and transformational leadership (Hallinger, 2003). Where instructional
leadership tends to be top-down, the transformational leader focuses on bottom-up participation (Marks & Printy, 2003). Second, instructional leadership is seen as transactional in focusing on the maintenance of the status quo and management of relationships. These behaviors are contrasted by transformational leadership where aspirations of organizational members are extended and shaped to create second order changes. This distinction between first and second order change is critical in understanding the value of transformational leadership for organizational change. Where the instructional leader seeks to influence conditions that directly impact curriculum and instruction (Cuban, 1988), transformational leaders create a climate where continuous learning is the norm and commitment exists between personal goals and the mission of the school (Hallinger, 2003; Lambert, 2002).

In their textbook on educational leadership, Hoy and Miskel (2001) state simply that transformational leadership is what teachers and other staff perceives when they think about their vision of the ideal leader. Transformational forms of leadership are attuned to the culture and organizational structure of the school and their influence on the meaning people associate with their work and their willingness to risk change (Hunt, 1999). Transformational school leaders recognize the motivating power to be found in tapping into rich organizational resources for ideas and knowledge (Meng-Chun Chin, 2007). Human capital is built within the school by leaders who encourage constant growth, participation and development of new roles and skills (Sergiovanni, 1995). Leithwood, Begley and Cousins (1994) conceptualize transformational leadership as follows:
The term ‘transform’ implies major changes in the form, nature, function and/or potential of some phenomenon; applied to leadership, it specifies general ends to be pursued although it is largely mute with respect to means. From this beginning, we consider the central purpose of transformational leadership to be the enhancement of the individual and collective problem-solving capacities of organizational members; such capacities are exercised in the identification of goals to be achieved and practices to be used in their achievement. (p. 7)

A conceptual model of transformational leadership has developed from research (Leithwood, 1994; Leithwood & Jantzi, 2006) that adapted, for schools, the Bass (1985) model constructed from research in non-school settings. Business and school settings share similar concepts with respect to the practice of leadership (Stewart, 2006). “They both must become learning organizations or they will fail to survive. Thus, leaders in business and education face similar challenges – how to cultivate and sustain learning under conditions of complex, rapid change” (Fullan, 2001, p. xi). In the next section, Leithwood’s model of transformational school leadership is described.

**The Leithwood Model of Transformational School Leadership**

Transformational school leaders persuade, inspire and motivate others to achieve results. This occurs not through the offer of rewards (transactional), but by tapping into the intrinsic values of staff and shaping those values to be consistent with the school’s mission, vision and values (Lashway, cited in Smith & Piele, 2006 p. 90). In fact, research indicates that transactional leadership behaviors have no consequential impact on school reform (Dumdum et al., 2002). Based upon this meta-analytic study by Dumdum and colleagues, Leithwood and Jantzi (2005) suggest that, “there is no justification, in our view, for continuing to measure it or report the results of studies that do measure it” (p. 180).
The transformational school leader model includes three broad categories; a mission centered focus on setting directions, a performance centered focus on developing people, and a culture centered focus on redesigning the organization. Contained within these categories are nine specific dimensions with multiple, more detailed leader practices embedded therein. Justification for these categories, dimensions, and practices is offered through findings from previous research on school leadership (Leithwood, 1994, 1995; Leithwood et al., 1996; Leithwood & Jantzi, 1990; Leithwood, Jantzi, & Fernandez, 1994; Leithwood, Jantzi, & Steinbach, 1999). Based upon information from several sources (Hallinger, 2003; Lashway, cited in Smith & Piele, 2006, pp. 93-94; Leithwood, 1994; Leithwood & Jantzi, 2006; Marks & Printy, 2003), Leithwood’s model is conceptualized here as follows:

**Setting Directions**

1. Build a school vision - Transformational leaders take a leading role in developing and articulating an organizational vision. This extends beyond the creation of goals to something deeper where the leader uses all available opportunities to communicate and clarify the school’s vision to all members of the school community. Vision as a key leadership quality consistently emerges in research on principal effectiveness (Leithwood & Riehl, 2003; Waters, Marzano & McNulty, 2003).

2. Foster consensus about and commitment toward group goals - Transformational leaders illicit cooperation by motivating teachers and others to work toward shared goals. Where transactional leaders work within the framework of a contract, transformational leaders build relationships around a covenant (Sergiovanni,
What the transformational leader helps to create is a culture where members examine their practices in the light of this covenant and hold themselves accountable to it. Across the organization, the transformational leader helps to create consistency between individual goals, group goals and the vision and makes use of and reference to goals in the decision-making process.

3. Hold high expectations for performance - Throughout the process of communicating core organizational values, the transformational leader helps all stakeholders understand that these values are non-negotiable. The leader here is unwavering in the practice of student-centered decision-making. Hard work, innovation, and professionalism are expected of others and embedded criteria for hiring new staff.

Developing People

4. Provide Intellectual Stimulation - Followers report that transformational school leaders compel them to reconsider basic assumptions about the work they do with and for students. The leader accomplishes this by encouraging staff to try new practices, evaluate and modify work as needed, and search for new ideas and information. Furthermore, the leader seeks new ideas from other schools, publicly recognizes quality performance and positive attitudes, and helps followers understand that risks taken and mistakes made as part of the improvement process are acceptable.

5. Offer individualized support - The transformational leader is accessible and approachable. The leader provides extended training as needed with the necessary resources to help individuals develop new skills and competencies. Although the transformational leader treats all followers equally, time and effort is spent getting to
know individual teachers in order to recognize and understand their strengths, weaknesses, needs and interests.

6. Model desirable practices and values - The success of the organization is exemplified by those who lead by doing rather than telling. Transformational leaders model that which they expect from others. Their decision-making demonstrates the value of considering problems from multiple points of view. The energy, enthusiasm, sense of humor, respect, and openness to feedback shown by the leader inspires dedication in those who follow.

*Redesigning the Organization*

7. Develop a collaborative school culture - By emphasizing teacher collaboration as part of the school’s vision and creating norms of excellence, care and respect for students and staff, the transformational leaders works to strengthen the school culture. “Small acts can have the biggest long-term effect: giving recognition to those who support the school’s core values; telling stories that connect the school’s past, present and future; and finding room for the idiosyncratic little rituals and celebrations that bind people together” (Lashway, cited in Smith & Piele, 2006, p. 94).

8. Create structures to foster participation in school decisions - Leithwood proposes that authority and influence are shared beyond the transformational leader. In his model “power is attributed by organizational members to whomever is able to inspire their commitments to collective aspirations, and the desire for personal and collective mastery over the capacities needed to accomplish such aspirations” (Leithwood & Jantzi, 2006, p. 204).
9. Create productive community relationships - All stakeholders must buy into the process of systemic transformational change. One of the key strategies for the transformational leader in this process is to bring internal and external stakeholders together through important linkages of communication (Duffy, 2006). After identifying key external stakeholders, they can be divided into one of four groups including those the leader trusts who (1) do and (2) do not agree with the change agenda, and those the leader does not trust who (3) do and (4) do not agree with the change agenda. From there, the leader should implement a communication plan that accomplishes the following: offers a clear and simple case for the school’s mission; communicates the learning needs of students; shares how the plan will meet learning needs and transform the school system; outlines consequences for success and failure; and consistently repeats the above message to external stakeholders.

Leithwood and his colleagues have influenced the field of educational administration by modifying the work of Bass and others to explain the impact of transformational leadership on school systems (Stewart, 2006). Table 2 (adapted from Marks & Printy, 2003) compares the theoretical elements of transformation leadership models offered by Bass and Leithwood. With the exception of creating productive community relationships, Marks and Printy find connections between each of the elements of the two models of transformational leadership. One of the potential weaknesses of the Bass model and the Multifactor Leadership Questionnaire, according to Leithwood and Jantzi (2006), is that the wide range of dimensions and behaviors of transformational school leadership may not be represented by this model and its measure.
The following is a comparison of the theoretical elements of transformational leadership proposed by Bass and Leithwood as adapted from Marks and Printy (2003).

Table 2

Comparison of Transformational Leadership Theoretical Elements

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Intellectual Stimulation</td>
<td>Build a school vision</td>
</tr>
<tr>
<td></td>
<td>Holds high expectations for performance</td>
</tr>
<tr>
<td></td>
<td>Provide Intellectual Stimulation</td>
</tr>
<tr>
<td></td>
<td>Model desirable practices and values</td>
</tr>
<tr>
<td>Inspirational Motivation</td>
<td>Build a school vision</td>
</tr>
<tr>
<td></td>
<td>Develop a collaborative school culture</td>
</tr>
<tr>
<td>Idealized influence</td>
<td>Foster consensus about and commitment toward group goals</td>
</tr>
<tr>
<td></td>
<td>Create structures to foster participation in school decisions</td>
</tr>
<tr>
<td>Individual Consideration</td>
<td>Offers individualized support</td>
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Leithwood and Jantzi (2006) propose that in order for transformational leadership practices to achieve the goal of school reform, school staff must be motivated in productive ways to respond to the reform efforts. Along with motivation, professional development must be provided to help build teacher the capacity to help make vision of reform a reality. The authors suggest further that teacher motivation and capacity are impacted not only by transformational leader behaviors but also by the school setting in which teachers work. The combination of these variables works to alter teacher practices and ultimately, improves student achievement. Figure 1 (adapted from Leithwood & Jantzi, 2006) explains leader effects on teachers and the practices.
A growing body of research supports the impact of transformational leadership behaviors on the variables that positively effect school reform. This research is summarized in the following section.

**Transformational School Leadership Research**

In 2005, Leithwood and Jantzi published a review of 10 years of transformational school leadership research. This meta-analysis reviewed 33 studies, 29 of which looked at mediator variables believed to have an indirect impact on student outcomes. Those variables included school culture (e.g., Barnett & McCormick, 2004), organizational commitment (e.g., Yu, Leithwood & Jantzi, 2002), teacher job satisfaction (e.g., Bolger, 2001), changed teacher practices (e.g., Leithwood et al., 2004), planning and strategies for change information collections and decision making processes, and participatory decision-making structures (e.g., Leithwood, Aitken, & Jantzi, 2001), pedagogical and instructional quality (e.g., Marks & Printy, 2003), organizational learning (e.g., Silins, Mulford & Zarins, 2002) and collective teacher efficacy (e.g., Ross, 2004). A review of these 29 studies reveals that transformational school leadership had uniformly positive effects on all of these mediators.
Nine studies in Leithwood and Jantzi’s (2005) meta-analysis measured the effects of transformational school leadership on one or more measures of academic achievement including mathematics, literacy, combined academic variables and aggregate school-performance. Overall, the limited evidence suggests that transformational leadership behaviors have a positive impact on student achievement. Using student performance on national tests, Ross (2004) found significant and positive effects of transformational leadership on math and language test performance while other researchers (e.g., Leithwood et al., 2004) revealed positive but non-significant results. Silins and Murray-Harvey (1999) reported a significant indirect relationship between transformational leadership and student performance on an Australian national examination given at the end of high school. Transformational leadership also showed positive effects on student performance on assessments of higher order thinking (Marks & Printy, 2003). Of the nine studies reviewed, six showed a significant relationship between some form of student achievement and transformational school leadership. The meta-analysis also identified examined student engagement as an important predictor of academic achievement and found significant, positive, direct and indirect relationships between engagement and transformational leadership (e.g., Leithwood et al., 2003).

Since Leithwood and Jantzi’s (2005) meta-analysis subsequent research continues to support the notion that transformational leadership has positive direct and indirect correlations with several important schools. Leithwood and Jantzi (2006) undertook a study using survey data from more than 2,000 teachers and 655 primary schools. These surveys assessed variables related to transformational leadership behaviors of the school
leader, teacher motivation, teacher capacity, school environment or work setting and instructional practices in numeracy and literacy. These data were then analyzed and compared to student achievement data from national tests given to students over a 2-year (numeracy test) or 3-year (literacy test) period of time. Findings showed that transformational leadership had a strong and direct impact on teacher’s perceptions of work settings and motivation and weaker yet significant effects on teacher’s capacities. Also, transformational leadership had a significant and direct impact on teacher’s capacities. These four variables, leadership, teacher motivation, capacity, and work setting explained 25% to 35% of the variation in teacher classroom practices. Lastly, the study did not find a relationship between transformational leadership behaviors and gains in student achievement. This highlights the fact that increasing student learning are dependent to a certain degree on transformation leader behaviors that stimulate, encourage and promote specific kinds of instructional practices as opposed to change generally. In other words, change in instructional practices is good when it is the right kind of change based upon sound pedagogical research.

In another study, Ross and Gray (2006) measured the impact of transformational leadership on teacher efficacy. The authors described teacher efficacy as the belief that the teacher can bring about student learning, and hypothesized relationships between leadership and professional commitment, leadership and teacher efficacy, and professional commitment and teacher efficacy. More than 3000 teachers from 218 schools completed a survey measuring transformational leadership, collective teacher efficacy, and commitment to school mission, school as a professional community and
school-community partnerships. Results of the study showed transformational leadership impacted collective teacher efficacy and teacher commitment to the school mission and the professional community.

A third study (Korkmaz, 2007) measured the effect of principal leadership style on teachers’ job satisfaction and the organizational health of the school. A survey with three sets of questions was administered to more than 600 teachers. The first set of questions, derived from the MLQ, was asked to gather teacher perceptions about the transformational and transactional leader behaviors of their principal. The second set of questions, from the OHI, was asked to measure the organizational health of the school. The final set of questions was taken from a previous study on teacher job satisfaction. These questions were tested and found to be both reliable and valid. Findings from this study show that transformational leadership behaviors of the principal strongly and directly impacts teacher job satisfaction and organizational health. Transformational leadership also has indirect effects on organizational health. Interestingly, transactional leadership showed a negative impact on organizational health further supporting claims that transactional leadership does not warrant continued study in the field of educational leadership research (Leithwood & Jantzi, 2006). In summary, Korkmaz (2007) suggests that “the more the teachers perceive their principal as a transformational leader and the less they perceive him as a transactional leader, the more their level of job satisfaction increases and thus the school’s organizational health improves” (p. 43).

According to Leithwood and his colleagues (2004), only classroom instruction ranks higher than leadership among school-related factors for increasing student
achievement. Others support this position in the literature (Marzano, Waters, & McNulty, 2005). Leadership toward school reform, however, does not come without its costs. Emotion words like turmoil, resistance, stress, anger, and frustration often emerge in the literature to describe common reactions to the change process (Blankstein, 2004; Dufour, Dufour, & Eaker, 2008). Moore (2009) suggests that emotional intelligence is a requisite skill set for a principal attempting to restructure and reorganize the school system. Where emotions commonly run high in an environment of reform, employing emotional intelligence and developing relationships is the responsibility of all principals (Fullan, 2001). In the next section emotional intelligence is explored from a historical perspective.

**Historical Perspective of Emotional Intelligence**

For thousands of years in Western culture, philosophers and scientists have viewed the concepts of emotions and intelligence as entirely separate entities (Salovey & Mayer, 1990). Using evidence from neuropsychology, Gardner (1983) was the first to suggest the idea of various types of intelligence. Although Gardner did not conceptualize the idea of emotional intelligence (Mayer, 2006), two of his seven intelligence domains, interpersonal and intrapersonal, have influenced the development of emotional intelligence theory.

Before the concept of emotional intelligence emerged in the literature, Reuven Bar-On introduced the term emotional quotient in his 1988 dissertation. Today, Bar-On’s (1997) emotional quotient describes a variety of emotional and social skills including interpersonal, intrapersonal, stress management, adaptability and general mood. From this perspective, Bar-On views emotional intelligence through the lens of personality
Peter Salovey and John Mayer proposed the original theory of emotional intelligence in 1990. Through analysis of literature on cognition and emotion, the authors developed an ability-based model that bridges these two concepts. According to the authors:

Emotional intelligence refers to an ability to recognize the meanings of emotions and their relationships and to reason and problem-solve on the basis of them. Emotional intelligence is involved in the capacity to perceive emotions, assimilate emotion-related feelings, understand the information of those emotions, and manage them. (p. 267)

The concept of emotional intelligence is broken down into four separate ability areas arranged from basic to more complex skills in the following order; perceiving and expressing emotions, emotional facilitation of thinking, understanding emotion, and reflectively regulating emotions (Mayer, Caruso & Salovey, 2000; Mayer, Salovey & Caruso, 2008).

Perceiving and expressing emotions involves lower level competencies such as interpreting facial expressions. With emotional facilitation of thinking, maturity brings attention to changes in the environment that in turn shapes and improves thinking. At the third level, understanding emotion, one must recognize not only why emotions occur, but also that emotions fall on a continuum of intensity based upon the event and those involved. The highest level of emotional intelligence, reflectively regulating emotions, involves all of the three previous levels plus the ability to manage emotions and
behaviors in oneself and others. While Salovey and Mayer (1990) coined the term emotional intelligence, the concept took hold within American culture in 1995 with the publication of Goleman’s book, *Emotional Intelligence*.

Whereas Bar-On (1997) views EI from the perspective of personality theory and Salovey and Mayer (1990) frame it within a model of intelligence, Goleman (1998b) conceptualizes emotional intelligence in terms of a theory of performance. Goleman defines emotional intelligence as “the capacity for recognizing our own feelings and those of others, for motivating ourselves, and for managing emotions well in ourselves and in our relationships” (p. 317). Goleman and colleagues (Boyatzis, 2008) offer that a concept, in order to be considered an intelligence should be:

1. Behaviorally observable;
2. Related to biological functioning;
3. Related to life and job outcomes;
4. Different from other constructs such that it adds significantly to the understanding of human behavior;
5. Valid as a measure of a psychological construct.

Because traditional theories of intelligence suggest that cognitive abilities are set innate talents, Goleman moved away from use of the term intelligence towards the idea of competencies (Goleman, Boyatzis & McKee, 2002). This shift from a focus on intelligence is important, according to Goleman (1998b, 2001), in that competencies are better predictors of success and can be taught and learned. Within this framework,
Emotional intelligence is divided into four domains, two that address how we manage ourselves, and two that determine how we manage relationships.

In the area of personal competence, or how we manage ourselves, the domains include self-awareness and self-management (Cherniss & Goleman, 2001; Goleman, 1995, 1998; Goleman, Boyatzis & McKee, 2002). Self-awareness involves a deep understanding of one’s emotions, strengths, weakness, beliefs and values. Not only does the self-aware person understand her emotions, she also recognizes the impact those emotions have on her thought processes and behaviors.

The second domain within the area of personal competence is self-management. Those who can self-manage or self-regulate can control disruptive emotions and impulses. They are honest, trustworthy and flexible in the face of change. Self-management involves approaching challenges with a positive outlook and a readiness to seize opportunities that these challenges often reveal. While displays of emotion often are associated with the powerful, charismatic leader, research suggests that these behaviors, if engaged in with any regularity, are never the hallmark of good leadership (Goleman, 1998a).

Within the area of social competence, two other domains emerge from Goleman’s work. Social awareness involves being attuned to the thoughts and feelings of those around them. The socially aware individual not only understands, but also can empathize with the perspective of others. The socially aware individual also understands the bigger picture with respect to networks of decision-making and politics at the organizational level. This skill set is crucial toward driving resonance as leaders who have an awareness
of what others are thinking and how they are feeling can do and say what is appropriate
given the situation (Goleman, Boyatzis & McKee, 2002).

The final social competence domain in Goleman’s model is relationship
management. The ability to manage relationships requires a healthy combination of skills
included in each of the three other domains. Additionally, the skillful leader motivates
others with an exiting vision and persuades followers through a range of tactics while
supporting the development of new skills, abilities and improved performance. The
ability to manage conflict effectively within the web of relationships also is critical
toward moving the organization forward in a positive direction.

Research indicates that those with high emotional intelligence have better quality
relationships with others who tend to view them as more sensitive and competent as
compared to individuals with lower skills and abilities (Brackett et al., 2006; Brackett,
Warner, & Bosco, 2005). Even when controls are placed upon the traditional personality
variables and intelligence outcomes, significant relationships continue to exist between
emotional intelligence and the other variables measured (Mayer, Salovey & Caruso,
2008). Better relationships in the workplace also result with leaders who possess higher
levels of emotional intelligence. Other-rater assessment of leaders shows that those with
higher emotional intelligence demonstrate greater integrity, more productive
relationships, and a higher frequency of behaviors that support the goals of the
organization (Cote & Miners, 2006; Rosete & Ciarrochi, 2005).

The collective emotional intelligence of a school along with that of its leader can
be the difference between high and low performing schools (Fullan, 2001; Moore, 2009b;
Patti, 2007). A 2007 case study by Moore found benefits to emotional intelligence coaching for school leaders. Following coaching, leaders received improved ratings from others in emotional intelligence and more frequently stressed the importance of emotional intelligence in their work.

In a study of 20 urban principals, Williams (2008) identified the emotional and social competencies that separated outstanding from ordinary leaders. The critical competencies revealed through this research included self-confidence, self-control, consciousness, achievement orientation, initiative, organizational awareness, developing others, influence, analytical thinker, leadership, teamwork/collaboration influence, change catalyst, and conflict management.

These studies reviewed above reveal the importance of emotional intelligence for school leaders. The next section examines this notion further by offering information about the relative importance of emotional intelligence as compared to cognitive ability or traditional IQ.

**EQ Versus IQ**

For the greater part of the twentieth century, the use of Intelligence Quotient (IQ) tests was considered sufficient to measure intelligence in its complete form (Mandell & Perwani, 2003). This conceptualization of intelligence was further accepted as a predictor of success in life (Wechsler, 1958) and in the arena of leadership (Bass & Bass, 2008) as leader IQ consistently correlated positively with perceptions of leadership. With respect to the literature on intelligence testing, there is wide agreement that effective leaders
generally possess higher cognitive abilities compared to those who are considered less effective (Murensky, 2000).

A longitudinal study by Dulewicz and Higgs (1998) looked at work performance in relation to cognitive, emotional and managerial competencies. The results showed that emotional intelligence accounted for 36% of the variance in career advancement as compared to 27% for IQ and 16% for managerial competence. The discrepancy in actual variance between these variables could be higher according to Goleman (2001) in that some of the competencies classified by assessment instruments into the IQ and MQ domains (e.g., self-management, initiative, risk-taking), could arguably belong more appropriately placed within the emotional competence domain.

Following the emergence of emotional intelligence as a theory first proposed by Peter Salovey and John Mayer in 1990, the last decade of the 20th century saw the rise of several distinct models including those discussed above. Research on these models in relation to traditional IQ supports the existence of emotional intelligence as a genuine construct that contributes to performance in both separate and discrete ways (Goleman, 2001).

Research by Goleman (2001) in this area leads him to draw some conclusions from available data. First, if one considers the entire population, IQ is a better predictor of career success because it sorts people into fields they can realistically enter based upon their cognitive ability. However, when studies examine career success of individuals within specific jobs or professions, emotional intelligence, according to Goleman, is a more powerful predictor of success as compared to cognitive ability.
An emphasis on emotional competencies emerged from research on star performers in several hundred organizations (Goleman, 1998). Emotional competence in these studies was included as one of three domains with the other two being technical skills and cognitive abilities. This research revealed that, for all types of jobs, emotional competencies were two times more prevalent among star performers relative to technical skills and cognitive abilities combined. Additionally, data on competency models from forty companies showed strengths in cognitive ability were 27% more prevalent in star performers whereas strengths in emotional competencies were 53% more frequent.

This research suggests that while cognitive ability is important to effective leadership, emotional intelligence is of equal if not greater importance in differentiating ordinary leaders from great ones. The next section examines the relationship between emotional intelligence and transformational leadership behaviors geared toward school reform efforts.

**Emotional Leadership Styles**

In 2002, Goleman, Boyatzis, and McKee co-authored a book entitled *Primal Leadership*. In this book the authors describe six emotional leadership styles. The best leaders can flex between each of these styles to varying degrees depending upon the situation and the needs of those involved. The goal is to create resonance where the leader and followers are in tune with one another (Boyatzis & McKee, 2005). The resonant leader empathizes with, encourages, inspires and excites followers to get results, ideas very much connected to the concept of transformational leadership. In an effort to create resonance, the emotional task is primal in that it is the first and most important
aspect of leadership in as much as 70% of a follower’s perception of climate can be traced to the actions of the leader (Goleman, Boyatzis, & McKee, 2002). The six emotional leadership styles are described as follows:

1. The Visionary Leader moves others toward a shared vision through transparency, empathy and inspiration. Followers, especially more novice ones, respond best to this style when needing direction.

2. The Coaching Leader focuses on building the strengths of others through ongoing conversations about organizational goals. This approach is especially useful for developing the leadership capacities of followers.

3. The Affiliative Leader builds relationships with others and peace within the organization through collaboration and a focus on the emotional needs of followers. When used during times of stress or periods of healing, this approach can be especially effective.

4. The Democratic Leader seeks input of all kinds from all involved parties. This style is most appropriate when seeking to gain commitment or buy-in for new initiatives.

Each of these first four emotional leadership styles is said by the authors to produce resonance among a followership. The remaining two styles are to used cautiously as they tend more often than not to create dissonance.

5. The Pace-setting leader sets an example by working to an extremely high standard and expects the same from followers. This leader sets challenging goals and identifies poor performers. Often done badly, this leadership style
can have a negative impact on climate when the proper guidance and support are lacking.

6. The Commanding Leader is a dominant figure that gives powerful, clear directions expecting full compliance. This approach is appropriate in times of crisis where quick response is necessary. Under less critical circumstances, the Commanding Leader tends to disillusion and demoralize followers.

When used appropriately, these emotional leadership styles create positive results within an organization. In this next section, the importance emotional intelligence and transformational leadership behaviors are emphasized further. Here these dispositions and behaviors are identified as critical for principals to move forward initiatives that help their students become more socially and emotionally competent. Something required by Illinois Law.

**Leadership for Social and Emotional Learning**

The State of Illinois has been at the forefront nationally in identifying the development of emotional and social learning competencies in students as critical toward producing learners ready to lead productive lives as good citizens. These efforts formally began at the State level with the passage of the Illinois Children’s Mental Health Act of 2003 Public Act 93-0495 (SB 1951). Section fifteen of the Act states specifically that all schools in Illinois must teach and assess emotional and social competencies identified in the Illinois State Board of Education Social and Emotional Development Learning Standards.
Available research supports legislation outlined in the Illinois Children’s Mental Health Act of 2003 (O’Brien & Resnik, 2009). Social emotional learning has a positive impact on academic performance and standardized test scores (Payton et al., 2008; Weissberg & Durlik, 2009; Zins et al., 2004; Zins & Elias, 2003). School-wide SEL programs implemented with integrity result in improved social emotional skills, higher self-esteem, and improved pro-social behavior. Students who demonstrate higher social emotional competencies attend school more regularly, are less likely to experience emotional distress such as anxiety or depression, less likely to demonstrate conduct problems such as substance abuse or violence toward others, and are generally perceived by others as more intelligent and attractive compared to those who are less competent socially and emotionally.

In a recent meta-analysis of 700 positive youth development, SEL, character education, and preventive interventions, researchers found positive results in each study analyzed to date (Weissberg & Durlak, 2009). More specifically effective school-based SEL programs lead to:

23% improvement in emotional and social skills
9% improvement in attitudes about self, others, and school
9% improvement in school and classroom behavior
9% decrease in conduct problems such as classroom misbehavior and aggression
10% decrease in emotional distress such as anxiety and depression
11% point increase in achievement test scores.
Not only can students learn to become more socially and emotionally competent, adults can do so as well. In fact, research on emotional intelligence shows that it generally increases over the lifespan and that it can be learned through training and intervention programs.

Research in the area of social emotional learning is advanced by the Collaborative for Academic, Social and Emotional Learning (CASEL). Originally founded by Daniel Goleman in 1994, CASEL provides grants and training to Illinois schools to assist in the planning and implementation of high-quality, sustainable, school-wide SEL programming. According to CASEL, “social and emotional learning (SEL) is the process of acquiring the skills to recognize and manage emotions, develop caring and concern for others, establish positive relationships, make responsible decisions, and handle challenging situations effectively” (Devaney et al., 2006, p. 11).

According to CASEL, successful and sustained SEL programming requires the school leader to make SEL a priority by creating the ‘Big Idea’ of SEL and articulating it to the entire school community, prepare staff for change and be supportive throughout the process, model the emotional and social competencies he or she expects students to learn and teachers to teach and model, and advocate and be a visible and vocal supporter of SEL to the entire school community (Devaney et al., 2006). These second-order changes are accomplished by the transformational school leader who sets the direction, develops people and redesigns the organization (Leithwood et al., 2004). Devaney and colleagues (2006) frame the role of the principal in leading an SEL school as follows:

Beyond these practices, leaders must show ‘emotional intelligence’. Because their highly visible leadership role requires an ability to
demonstrate the SEL skills sought for all students and staff, they need to walk their talk. Modeling is a leader’s most powerful instructional tool. It gives the principal credibility in promoting SEL as a ‘big idea’ and in leading the planning and implementation of SEL programming, and it demonstrates the relational trust essential to the success of the school improvement effort. (p. 33)

Fortunately, emotional and social skills and competencies can be learned not only in childhood but also across the lifespan (Goleman, 1998). A 2009 report by Telesmart industrial psychologists supports this notion (Tasler & Bradberry, 2009). Between 2003 and 2007, the percentage of people identified as highly self-aware and socially aware rose from 13.7% to 18.3%. Among the tens of thousands of workplace employees studied, the percentage of people with a low or poor understanding of how their emotions impact their behavior fell from 31% to 14%. The authors suggest that emotional competency is a skill set that can be learned and unlearned. For the first time since longitudinal data collection began, 2008 saw a decline in overall EQ. While this dip is no doubt connected to the stressors of the national economic crisis, the authors point to the reality that remaining emotionally competent is not like riding a bike, rather it requires ongoing effort and practice.

This section adds to evidence suggesting that effective leaders must be emotionally intelligent. In the next section, the link between emotional intelligence and transformational leadership is examined to better understand the dispositions and behaviors that lead to school reform. Through the review of literature there is an attempt to answer two questions. One, is there a relationship between emotional intelligence and transformational leadership and two, does the former predict or serve as an antecedent to the latter?
Research Linking Transformational Leadership and Emotional Intelligence

When considering the potential relationship between emotional intelligence and transformational leadership, Brown and Moshavi (2005) consider three possibilities. First, emotional and social intelligence might be an antecedent of transformational leadership. Those with higher EI would better understand social situations and emotional states of themselves and others and therefore be more likely to choose behaviors consistent with transformational leadership. The second possibility is that EI indirectly supports or enhances transformational leadership rather than predict the behaviors directly. A third consideration is that EI is directly associated with desired outcomes but independent of transformational leadership. A review of the literature suggests that the first and second possibilities outlined by Brown and Moshavi are equally or more likely than the third.

Several research studies this decade point to the relationship between transformational leadership and emotional intelligence. Palmer, Walls, Burgess, and Stough (2001) found that an underlying competency of transformational leadership is the person’s ability to manage and monitor the emotions of one’s self and others. These abilities, the authors summarized, are specifically linked to transformational leader behaviors of Inspirational Motivation and Individualized Consideration. Gardner and Stough (2002) found similar results linking transformational leadership and emotional intelligence with the ability to understand and manage emotions emerging as strong predictors of transformational leadership specifically in the areas of Inspirational Motivation and idealized influence. Further, these researchers found that one of the key
(components of Individualized Consideration is the ability to understand the needs of followers and to respond accordingly.

In another study, Barbuto and Burbach (2006) studied 80 elected officials and between three and six members of their staff. This research was undertaken to assess the relationship between emotional intelligence and transformational leadership. The authors hypothesized emotional intelligence in the areas of empathetic response, mood regulation interpersonal skills, internal motivation, and self-awareness (Carson, Carson, & Birkenmeier, 2000) would relate positively to transformational leadership as measured by the MLQ. Results showed several relationships between emotional intelligence and self-reported transformational leadership behaviors. With respect to rater reports, only empathetic response was related to the transformational leader behavior of Intellectual Stimulation (r = .16, p < .01) and individual consideration (r = .16, p < .01). These findings are consistent with earlier research (Barling et al., 2000; Gardner & Stough, 2002; Kellett et al., 2002; Wolff et al., 2002).

Earlier research (Barling et al., 2000) showed that the degree to which leaders were said to possess idealized influence, Inspirational Motivation, and Individualized Consideration was directly correlated with the level of emotional intelligence according to subordinate ratings. Sivanathan and Fekken (2002) found that their followers perceive leaders with higher emotional intelligence as more effective and transformational. Ashkanasy and Tse (2000) revealed that transformational leaders show emotions to elicit positive thinking among followers about new ideas and a developing vision. In particular, this research showed that leaders elicit optimism through the support offered. Without
this support employees can become pessimistic, leading to less effort and a decrease in performance (Manion, 2000). Through the use of influence, transformational leaders motivate followers to actively pursue long-term goals and strategic objectives (Berson et al., 2001).

Ashkanasy, Hartel and Daus (2002) found that transformational leaders use empathy, social skills, and self-awareness to create positive relationships, communicate vision, and maximize results. Emotional intelligence ability contributes to transformational leadership behavior and positively impacts subordinate performance by limiting frustration and increasing satisfaction (Leban & Zulauf, 2004; McColl-Kennedy & Anderson, 2002).

Mandell and Pherwani (2003) assessed the predictive relationship emotional intelligence and transformational leadership. The researchers also examined the impact of gender on the relationship between these two variables. A small sample of 32 managers completed the MLQ5x to determine leadership style and the Bar-On Emotional Quotient Inventory (Bar-On, 1997) to gather emotional intelligence scores of the leaders.

The EQ-i (Bar-On, 1997) is a measure of emotional intelligence containing 133 items broken down into 15 factorial components and five main components. The Intrapersonal scale measures one’s self-regard, emotional self-awareness, assertiveness, and independence. Those individuals who possess greater levels of empathy and social responsibility tend to receive higher scores on the Interpersonal scale of the Bar-On EQi. The Stress Management scale assesses the rater’s level of tolerance to stress and ability to control impulses. Those who effectively practice reality testing, flexibility and problem
solving score higher on the Adaptability scale. Lastly, the General Mood scale captures a person’s level of overall optimism and happiness.

To examine the predictive relationship between emotional intelligence and transformational leadership a hierarchical regression analysis was conducted. Emotional intelligence, gender and the interaction between these two variables were used as the predictor variables while transformational leadership was used and the criterion variable. The statistical analysis revealed that emotional intelligence in this study did predict transformational leadership. A significant \( r = .499, p < .05 \) linear relationship was found between the two variables. Furthermore, while females scored higher than males on the measure of emotional intelligence, gender had no impact on the relationship between transformational leadership and emotional intelligence. In other words, even though females in this study showed greater emotional intelligence as compared to males, there was no statistically significant gender difference in emotional intelligence as a predictor of transformational leadership. These findings are consistent with those from a 1999 study by Sosik and Megarian where the self-awareness, motivation, empathy, and social skills of the leader predicted transformational leadership styles.

In another study, investigators examined the antecedent factor of emotional intelligence related to transformational leadership among 51 department managers and 252 employees in 23 small to medium sized business firms (Wang & Huang, 2009). The authors hypothesized that transformational leadership and emotional intelligence would be related and that further, the former would mediate the relationship between the latter and group cohesion. Regarding the first hypothesis, findings showed that emotional
intelligence explained 26.4% of the variance of transformational leadership ratings \((p < .05)\). The second hypothesis, examined through the use of hierarchical regression analysis, showed that transformational leadership did in fact mediate the relationship between emotional intelligence and group cohesion. Further, the self-reported emotional intelligence of the leader predicted the transformational leadership behaviors of the leader as assessed by other-raters. Leaders who possess and demonstrate emotional and social competencies exhibit more transformational leadership behaviors, which in turn impact both individual and group consequences.

A more recent study measured the relationship between transformational leadership and emotional intelligence of project managers based upon self-report and other-rater assessment from three distinct groups of employees (Lindebaum & Cartwright, 2010). Using different instruments to measure these constructs as compared to the current study, researchers nevertheless found significant relationships between other-rater assessment of the project managers’ transformational leadership and emotional intelligence across a group of supervisors and two employee groups. Findings from regression analyses reveal not only a correlation between the variables but also significant F-ratios among same-source ratings suggesting that emotional intelligence of project managers is a predictor of transformational leadership.

A review of the literature revealed just two recent studies addressing the relationship between dispositions and leadership behaviors of professionals in a school leadership position. In a qualitative study (Hinton, 2008), two groups of principals were examined. One group of principals worked at schools that made Adequate Yearly
Progress while the other group of principals worked at schools that did not. The study included three research questions including: How do leaders’ conversations about trust vary with leader self-awareness? In what ways do these distinctions in language identify emergent themes about self-awareness and how it is manifested in conversations about trust? How does student learning as measured by performance on the Illinois Standards Achievement Test vary with the development of leader self-awareness?

The findings showed that principals working at schools that made AYP demonstrated more self-awareness, social awareness, and relationship management as compared to their counterparts at schools that did not make AYP. Principals in schools that made AYP recognized an acknowledgement of distrust as a normal phenomenon and one that positively impacts staff assessment of the competence, integrity, benevolence, and professionalism of the leader. At schools that made AYP, principals showed higher emotional intelligence when faced with a betrayal of trust and its restoration. Finally, principals from schools that made AYP described competencies from several emotional intelligence domains when discussing their own professional expertise.

In a 2008 quantitative study, Hackett and Hortman looked at the relationship between transformational leadership and emotional and social competencies among assistant principals. The sample included forty-six assistant principals, both males and females, who worked in a variety of settings across elementary, middle and high schools in a large public school district in Georgia. Each of the subjects completed both the Multifactor Leadership Questionnaire (MLQ5x) and the Emotional Competencies Index-University Edition (ECI-U).
The calculation of Pearson correlation coefficients revealed the relationships among the five MLQ scales (Idealized Influence-Attributed, Idealized Influence-Behavior, Inspirational Motivation, Intellectual Stimulation, Individual Consideration) and the 21 emotional competency scores (Emotional Self-Awareness, Accurate Self-Assessment, Self-Confidence, Emotional Self-Control, Trustworthiness, Conscientiousness, Adaptability, Optimism, Achievement Orientation, Initiative, Empathy, Organizational Awareness, Service Orientation, Developing Others, Inspirational Leadership, Influence, Communication, Change Catalyst, Conflict Management, Building Bonds, Teamwork/Collaboration). Findings from the data analysis showed a clear relationship between many of the emotional competencies as measured by the ECI-U with the transformational leader behaviors as identified by the MLQ. More specifically, Intellectual Stimulation and Inspirational Motivation positively correlated with 16 and 13 of the emotional competencies respectively. Several emotional competencies also were positively correlated with the other three transformational leadership scales including Idealized Influence-Behavior (5), Idealized Influence-Attributed (8), and Individual Consideration (8). More than three out of five emotional competencies were significantly related to transformational leadership behavior. Developing Others was significantly related to all five transformational scales. Four competences including Achievement Orientation, Initiative, Inspirational Leadership, and Conflict Management correlated with four of the five transformational scales while only five competencies (Emotional Self-Awareness, Emotional Self-Control, Conscientiousness, Optimism, and Teamwork) did not correlate with any of the
transformational scales. Table 3 shows correlation data from the Hackett and Hortman (2008) study.

Findings from the research reveal that the SEL domains of social awareness and relationship management contain the highest number of competencies positively correlated with transformational leadership. Furthermore, the authors identified 11 variables for emotional competency that accounted for more than one-quarter ($r > .50$) of the variance in leadership style including Self-Confidence ($r = .588$ for Idealized Influence- attributed and Intellectual Stimulation), Adaptability ($r = .555$ for Intellectual Stimulation, Initiative ($r = .507$ for Intellectual Stimulation), Developing Others ($r = .538$ for Intellectual Stimulation and $r = .523$ for Individual Consideration), Communication ($r = .623$ for Individual Consideration), Change Catalyst ($r = .695$ for Intellectual Stimulation), and Conflict Management ($r = .614$ for Individual Consideration).

Table 3

*Correlations for Transformational Leader Behaviors and Emotional Competencies (p < .05)*

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<th>MLQ Scale</th>
<th>Emotional Competency</th>
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<td>Idealized Influence</td>
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These findings are consistent with research examining the relationship between emotional and social intelligence and leadership experience (Kobe, Reiter-Palmon & Ricker, 2001). In this study, 192 undergraduates completed questionnaires measuring the above listed variables each of which were positively correlated with one another. Results showed that while both emotional and social intelligence are components of leadership, it is social intelligence that plays the primary role in leadership.

Hackett and Hortman (2008) offer several implications and limitations of their research along with recommendations for future study. Implications are expanded upon in the next section and include the creation of more meaningful and valuable university training programs for aspiring leaders and professional development models for those already serving in a leadership capacity across school systems. Limitations and recommendations for future research are addressed in this current study and include the fact that the research was conducted on assistant principals rather than principals and the only data available was based upon self-report.

This current study extends the work of Hackett and Hortman (2008) in that it utilizes both the MLQ and the latest version Hay Group’s measure of emotional and social competency to examine the dispositions and leader behaviors of principals. The next section examines, in detail, Hay Group’s assessment instrument, the Emotional and Social Competency Inventory (ESCI).
The Emotional and Social Competency Inventory (ESCI)

The Emotional and Social Competency Inventory (ESCI) is the latest version of a 360-degree assessment from Hay Group based upon earlier instruments including the ECI 1.0 and the ECI 2.0 (Boyatzis, 2007). Each version of the instrument is based, to varying extents, on Goleman’s emotional intelligence (1998) and the competency questionnaire created by Boyatzis (2007).

Both the ECI 1.0 and 2.0 were found to possess acceptable reliability and validity across a number of studies (Boyatzis, 2007; Boyatzis & Sala, 2004). While these results were deemed acceptable for practical use by coaches and other professionals for the purposes of training, some raised concerns about the instability of the instrument. That is, the competency scales were invalid as separate measures and the clusters tended not to differentiate themselves from one another. This criticism found its greatest support among the professional research community interested in utilizing an instrument with a higher psychometric standard.

In a review of the available research data on the ECI 2.0, Brackett and Geher (2006) revealed that half of the 18 scales on the self-report measure showed reliability coefficients below .65. Not only did factor analysis of the 72 items show that the instrument contains only nine factors, these identified factors do not correlate with the four broad conceptual clusters of self-awareness, self-management, social awareness, and relationship management. Furthermore, factor analysis did not support the structural validity of the full-scale ECI score. The authors shared additional concerns about the psychometric properties of the ECI 2.0 based upon the reality that many of the validation
studies were conducted with small sample sizes of fewer than 30 participants (Boyatzis & Sala, 2004).

In an effort to address concerns about the psychometric properties of the ECI 2.0, Hay Group undertook the process of re-conceptualizing the instrument as a measure of both emotional and social competencies (Boyatzis, 2007). Each item from the ECI 2.0 was analyzed with factor analysis to ensure that the items were clear, concise, and related to specific behaviors. The results of this analysis confirmed the four competency clusters but lead to a differentiation between clusters that focus on the ability to understand and use emotions internally versus the ability to apply that understanding to interactions with others. In this re-conceptualization, self-awareness, self-management and social awareness fall within the former category while relationship management falls within the latter. The data analyses also lead to a reduction in competencies from 18 to 12 along with the creation of an algorithm based upon consistency of behavior rather than developmental levels. The revised model of emotional and social intelligence clusters and competencies is conceptualized by Boyatzis as follows:

**Self-Awareness**

1. Emotional Self-Awareness is a person’s ability to recognize emotions and the impact those have.

**Self-Management**

2. Achievement Orientation involves the effort to meet or improve upon a standard of performance.

3. Adaptability is one’s ability to be flexible in the face of change.
4. Emotional Self-Control is demonstrated by one’s ability to manage emotions and impulses.

5. Positive Outlook is achieved when the pursuit of goals continues even when setbacks occur.

Social Awareness

6. Empathy involves being able to know, understand and be genuinely concerned for the perspectives and feelings of others.

7. Organizational Awareness is the ability to recognize the power relationships and emotional climate of a group.

Relationship Management

8. Conflict Management is the demonstrated ability to understand, negotiate and resolve disagreements.

9. Coach and Mentor is someone who is adept at sensing the professional development needs of others and working to increase the skills and competencies of followers.

10. Influence is achieved by effectively utilizing tactics of persuasion.

11. Inspirational Leadership is defined simply as inspiring and guiding the work of both individuals and groups.

12. Teamwork involves the pursuit of shared goals through the creation of group synergy.

The change from 18 to 12 competencies is further explained by Boyatzis as a means of reducing concerns about the psychometric properties of the instrument. For
example, Self-Awareness and Accurate Self-Assessment from the ECI 2.0 were combined into one competency, Emotional Self-Awareness, because factor analysis could not differentiate between the two. This also is true for the Self-Confidence and Change Catalyst competencies as these are not distinguishable from Achievement Orientation. Concerns also existed about the Self-Confidence competency from the standpoint that the expression of these behaviors often is impacted by cultural norms. The Optimism competency was changed in the ESCI to Positive Outlook to reflect two key points. First, optimism is a personality trait, not to be confused with an emotional competency (Buchanan & Seligman, 1995). Second, using the terminology of Positive Outlook, according to Boyatzis, allows for a more direct observation of behavior rather than a focus on a personality trait. The emotional competency Transparency did not statistically separate itself from other competencies and was therefore eliminated from the ESCI. So too was Service Orientation as it was found to be a product of Empathy. Last, the Developing Others competency was changed to Coach and Mentor, as it is believed to better describe what good leaders do.

Research on this latest version of Hay Group’s assessment of emotional and social competencies suggests that the ESCI is more psychometrically sound relative to previous versions. As such, the instrument is appropriate for this study as a 360-degree assessment of the emotional and social competencies of school principals. The rationale for use of the ESCI is articulated in the next section.
Rationale for the Research

Sustainable reform efforts are needed to move schools closer toward those ideals of equity, justice and success for every student. “School reform in the 21st century requires leaders to transform schools into autonomous, systems-thinking organizations, revolving around professional learning communities that can embrace change and create a high performing learning environment for students and teachers (Moore, 2009a, p. 20). According to Hargreaves and Fink (2003; 2005), sustainable leadership helps create learning, promises long-term success of the organization, distributes leadership, works toward social justice, develops resources, embraces diversity, and commits to actions that benefit the school and its students.

The success or failure of a school and its students often hinges on the effectiveness of leadership. Leadership is a catalyst for reform efforts by involving all stakeholders in student achievement and offering all students opportunities for engagement and success (Hopkins, 2006). From this perspective the leader has a moral obligation to pursue social justice for all students. Among the myriad leadership theories posed and studied since the early 1900’s transformational leadership relates directly in many respects to the need for school reform sought by No Child Left Behind. Through Idealized Influence, Inspirational Motivation, Intellectual Stimulation, and Individualized Consideration, transformational leaders create a followership that views work from a new perspective, commits to the vision and mission of the organization, and reaches its fullest potential.
A growing body of research considers the antecedents to transformational leadership. Among these studies there is evidence to suggest that the emotional and social competencies of the leader are related to their ability to contribute positively to the transformation of an organization. In the school setting, research with assistant principals showed a clear relationship between many of the emotional and social competencies with the transformational leader behaviors that facilitate real, meaningful and lasting school reform.

Many school districts today face the challenge of recruiting, hiring, developing and retaining quality candidates for the role of school principal (Gaussel, 2007). “Today a principal needs to be a teacher, a curriculum expert, an assessment expert, a bringer-together, an authority, a public relations and communication expert, a financial analyst, and the guardian of legality and fairness” (p. 7). Some research suggests that the lack of quality applicants for the role if principal is related to inadequate training that is too disconnected from actual practice and empirical knowledge (Levine, 2005).

In response to requests to revisit educational leadership standards, the National Policy Board for Educational Administration (NPBEA) updated the 1996 ISLLC standards with the publication of Educational Leadership Policy Standards: ISLLC 2008 (Wilhoit, 2008). This work was based upon the growing body of research on education leadership related to characteristics of good leadership, the principal’s role in increasing student achievement, and best practice for increasing the national pool of qualified and effective leaders. The result was a compilation of six standards for school leaders to
promote the success for every student. The Educational Leadership Policy Standards:

ISLLC 2008 standards are as follows:

1. Setting a widely shared vision for learning;
2. Developing a school culture and instructional program conducive to student learning and staff development;
3. Ensuring effective management of the organization, operation, and resources for a safe, efficient, and effective learning environment;
4. Collaborating with faculty and community members, responding to diverse community interests and needs, and mobilizing community resources;
5. Acting with integrity, fairness, and in an ethical manner;
6. Understanding, responding to, and influencing the political, social, legal, and cultural contexts.

Embedded within each of the standards are various functions to be performed by the school leader. For example, within each of the six standards there are functions such as; collaboratively develop and implement a shared vision and mission, promote continuous and sustainable improvement, create personalized and motivating learning environments for students, promote and protect the welfare and safety of students and staff, build and sustain positive relationships with families and caregivers, and promote social justice and ensure that individual student needs inform aspects of school.

As one reads through the ISLLC standards and functions it is clear that words like collaboratively develop, create, build, sustain, and promote, imply the need for leadership behaviors that transform the school culture. Further, language that speaks to the need for
the leader to nurture, advocate, build relationships, promote social justice, and model principles of self-awareness, highlights the implied connection of these transformational leadership behaviors to the emotional and social competencies of the school leader. These important connections already have been drawn in literature related to the relationship between social and emotional learning, the preparation of teachers, and the Illinois Teacher Standards (Flemming & Bay, 2004).

This research is important because it seeks to understand the dispositional antecedents of transformational leadership. To identify specific emotional and social competencies that most heavily influence the transformational leader behaviors of school principals would contribute to research in field of educational leadership. “If emotional intelligence scores can predict transformational leadership, organizations may find emotional intelligence measures to be valuable tools in the hiring, promotion and development of organizational leaders” (Mandell & Pherwani, 2003, p. 400).

“Training can enhance the personal competencies so vital for effective leadership in today’s schools, but only if it is appropriately designed and implemented” (Cherniss, 1998, p. 28). One such example is Star Factor Coaching (Patti & Tobin, 2006). This program, being piloted in New York City schools, coaches principals to become more socially and emotionally competent. Many principals need training and support to manage emotion and conflict (Patti, 2007). Further, this training and education is essential to develop school leaders who are more equipped to lead change.

“Emotional intelligence is important for school administrators and it is time to implement training programs for school administrators to develop these skills to deal with
emotions associated with school reform” (Moore, 2009a, p. 24). Given research showing that emotional and social competencies can be taught and learned over the lifespan (Goleman 1998b, 2001), being able to drill down to the specific skills and competencies that promote transformational leadership has tremendous implications for school reform efforts, principal training, professional development and hiring practices.

**Summary**

This chapter summarized the literature related to transformational leadership and emotional intelligence. Different conceptual models were provided for each construct along with research supporting the notion that effective school leaders possess strong emotional intelligence and demonstrate transformational leadership behaviors. Emotional intelligence was examined in comparison of and contrast to cognitive ability or traditional IQ. Research linking emotional intelligence and leadership was examined as were two instruments commonly used to assess these dispositions and behaviors. Six emotional leadership styles were described. The role of the principal in leading important work of social emotional learning for students was identified as support for the proposed research. Limited research assessing the relationship between emotional intelligence and transformational leadership behaviors among assistant principals was reviewed. Finally, the rationale for the current study was presented.
CHAPTER III

METHODOLOGY

Restatement of Purpose

In the first two chapters, an overview of research related to emotional intelligence, social intelligence, and transformational behaviors of leaders in various fields was presented. Given the limited research on the relationship of these factors among school leaders, an examination is warranted with implications for hiring practices, leadership education programs, and ongoing professional development for and evaluation of school administrators. The purpose of this study is to examine the predictive relationship between the social and emotional competence and transformational leadership style of school principals.

School principals and their superintendents will be selected for participation in the study. These professionals will be chosen from a database of schools participating in a grant through the Illinois Children’s Mental Health Partnership, The Collaborative for Academic, Social and Emotional Learning, and the Illinois State Board of Education (ISBE). Seventy-six sets of subjects are available for participation in the study. The demographic data from the participating principals, superintendents, and schools will be gathered and described.

This chapter describes the methods employed to study the relationships among emotional competence, social competence and transformational leadership, and to test the
22 null hypotheses outlined. Components addressed in this chapter include research questions, null hypotheses, measures, sample population, anticipated ethical issues, data collection procedures, data analysis and summary.

**Research Questions**

This study will seek to answer the following research questions:

1. What is the relationship between the principal’s self-assessment of transformational leader behaviors and the principal’s emotional and social competencies?

2. What is the relationship between the superintendent’s assessment of the principals’ transformational leader behaviors and the superintendent’s assessment of the principal’s emotional and social competencies?

3. What is the relationship between the principal’s self-assessment of transformational leader behaviors relative to the superintendent’s assessment of the principal’s transformational leader behaviors?

4. What is the relationship between the principal’s self-assessment of emotional and social competency relative to the superintendent’s assessment of the principal’s emotional and social competency?

**Null Hypotheses**

This study will explore several null hypotheses. Those hypotheses are articulated as follows:
Principal’s Self-Assessment of Transformational Leader Behaviors and Emotional and social competencies

1a. There is no relationship between the use of Attributed Idealized Influence as measured by the MLQ (5X-Short) and the emotional and social competencies of principals as measured by the ESCI (Version 3.0).

1b. There is no relationship between the use of Behavioral Idealized Influence as measured by the MLQ and the emotional and social competencies of principals as measured by the ESCI.

1c. There is no relationship between the use of Inspirational Motivation as measured by the MLQ and the emotional and social competencies of principals as measured by the ESCI.

1d. There is no relationship between the use of Intellectual Stimulation as measured by the MLQ and the emotional and social competencies of principals as measured by the ESCI.

1e. There is no relationship between the use of Individualized Consideration as measured by the MLQ and the emotional and social competencies of principals as measured by the ESCI.

1f. There is no relationship between any of the dimensions of Transformational Leadership as measured by the MLQ and any combination of the competencies or clusters of competencies as measured by the ESCI.
Superintendent’s Assessment of the Principals’ Transformational Leader Behaviors and Emotional and social competencies

2a. There is no relationship between the superintendent’s assessment of the principal’s use of Attributed Idealized Influence as measured by the MLQ and superintendent’s assessment of the principal’s emotional and social competencies as measured by the ESCI.

2b. There is no relationship between the superintendent’s assessment of the principal’s use of Behavioral Idealized Influence as measured by the MLQ and superintendent’s assessment of the principal’s emotional and social competencies as measured by the ESCI.

2c. There is no relationship between the superintendent’s assessment of the principal’s use of Inspirational Motivation as measured by the MLQ and superintendent’s assessment of the principal’s emotional and social competencies as measured by the ESCI.

2d. There is no relationship between the superintendent’s assessment of the principal’s use of Intellectual Stimulation as measured by the MLQ and superintendent’s assessment of the principal’s emotional and social competencies as measured by the ESCI.

2e. There is no relationship between the superintendent’s assessment of the principal’s use of Individualized Consideration as measured by the MLQ and superintendent’s assessment of the principal’s emotional and social competencies as measured by the ESCI.
2f. There is no relationship between the superintendent’s assessment of the principal’s use of any of the dimensions of Transformational Leadership as measured by the MLQ and the superintendent’s assessment of the principal’s use of any combination of the competencies or clusters of competencies as measured by the ESCI.

**Principals’ Self-Assessment of Transformational Leader Behaviors Relative to the Superintendent Assessment of the Principals’ Transformational Leader Behaviors**

3a. There is no difference between self-assessment and other-rater assessment of the use of Attributed Idealized Influence as measured by the MLQ.

3b. There is no difference between self-assessment and other-rater assessment of the use of Behavioral Idealized Influence as measured by the MLQ.

3c. There is no difference between self-assessment and other-rater assessment of the use of Inspirational Motivation as measured by the MLQ.

3d. There is no difference between self-assessment and other-rater assessment of the use of Intellectual Stimulation as measured by the MLQ.

3e. There is no difference between self-assessment and other-rater assessment of the use of Individualized Consideration as measured by the MLQ.

**Principals’ Self-Assessment of Emotional and Social Competency Relative to the Superintendent Assessment of the Principals’ Emotional and Social Competency**

4a. There is no difference between self-assessment and other-rater assessment of the principals’ self-awareness as measured by the ESCI.

4b. There is no difference between self-assessment and other-rater assessment of the principals’ self-management as measured by the ESCI.
4c. There is no difference between self-assessment and other-rater assessment of the principals’ social awareness as measured by the ESCI.

4d. There is no difference between self-assessment and other-rater assessment of the principals’ relationship management as measured by the ESCI.

**Measures**

Following an extensive review of literature and available research a demographic survey was created and two data collection instruments selected for the purpose of the study. The Multifactor Leadership Questionnaire (MLQ5x) will be used to assess the transformational leader behaviors of principals (Bass & Aviolo, 2000), while the Emotional and Social Competency Inventory (ESCI) examines self-awareness, social awareness, self-management and relationship management.

**Demographic Variables**

According to Mayer, Salovey and Caruso (2002), demographic variables may influence leadership style and emotional intelligence. Principals participating in the study completed a short demographic survey. Information requested will include age, gender, years of administrative experience, years in the current position, and highest leadership degree attained. Principals also were asked to identify general information about the school they lead and the district they work in including the grade range of students, the size of the school, and the number of schools in the district, and the number of years the principal has worked with his or her superintendent.
Multifactor Leadership Questionnaire (MLQ5x)

Along with the demographic survey, the Multifactor Leadership Questionnaire (MLQ5x) was utilized for the study. Among other factors, the MLQ assesses five dimensions of transformational leadership including Idealized Influence-Attributed (IIA), Idealized Influence-Behavior (IIB), Inspirational Motivation (IM), Intellectual Stimulation (IS), and Individual Consideration (IC). For the purposes of this study, the participants were asked to complete items related to the five transformational factors of the MLQ.

The MLQ is widely used and considered by many to be among the best-validated measures of transformational leadership (Ozaralli, 2003). The MLQ, published by Mind garden, Inc., has undergone multiple revisions to better identify the component factors and address shortcomings of the psychometric properties (Avolio et al., 1995). The latest version was developed through research on earlier versions and confirmatory factor analyses (Avolio, Bass, & Jung, 1999). The MLQ (5X-Short) is a 45-item rating scale with two versions. Two versions of the MLQ (5X-Short) will be used for this study. Principals will complete the self-assessment while their superintendents will complete the other-rater version. The anchors used to determine the MLQ transformational leadership factors are coded with scores ranging from 0 (not at all) to 4 (frequently, if not always).

Research indicates that the MLQ has strong construct validity, internal consistency and factor loadings (Avolio et al., 1995; Bass & Avolio, 1997; Bass & Avolio, 2000). A study by Avolio and Bass (2004) demonstrated total item internal consistency ranging from .64 to .92 with reliability of .70 or higher for each of the
transformational scales. More recently, research confirms the construct validity of the five individual transformational leadership factors as part of an overall nine-factor full range leadership model (Muenjohn & Armstrong, 2008). Using Modification Indices (Arbuckle, 1997) to improve the fit of the tested models, the authors suggest that the nine-factor model could be seen as a “reasonable fit” to the data ($\chi^2 = 540.18; df = 474; p < .01; \chi^2/df = 1.14; GFI = .84; AGFI = .78$).

*Emotional and Social Competency Inventory (ESCI)*

Along with the MLQ, principals and their superintendents also completed the Emotional and Social Competency Inventory (ESCI). The ESCI is a 72-item rating scale measuring 12 competencies of social and emotional intelligence organized into four clusters including Self-Awareness, Social Awareness, Self-Management and Relationship Management. Respondents using the rating scale choose among answers including never, rarely, sometimes, often, consistently, and don’t know.

The ESCI is a re-conceptualizing of the Emotional Competency Inventory (ECI-2.0). The ECI-2.0 has shown solid reliability and validity in a variety of studies (Wolff, 2006). For the other-rater’s assessment, Cronbach’s alpha internal consistency coefficients for the ECI-2.0 competencies range from .68 (Transparency) to .87 (Emotional Self-Awareness) with an overall coefficient of .78. The internal consistency for self-ratings is less stable and reliable as compared to other ratings ranging from .47 (Conflict Management) to .76 (Inspirational Leadership) with an overall rating of .63.

Studies have revealed that the ECI shows solid construct validity and is related to the sensing/intuiting and thinking/feeling dimensions of the MBTI (Burckle, 2000). There
is a correlation between the ECI and Goldman’s affiliative and coaching leadership styles (Carulli & Com, 2003). Studies also suggest that the ECI is directly and indirectly related to climate (Sala, 2003) and group emotional intelligence (Stubbs, 2005). The ECI also has demonstrated solid discriminant validity in that it is not related to critical thinking. An overall validity study of the self-assessment version of the ECI confirms the construct, discriminant and criterion validity of this instrument (Bryne, 2003).

The Emotional and Social Competency Inventory evolved from the ECI to differentiate the emotional aspects of leadership (i.e. one’s ability to understand and use emotions about oneself) from the social aspects (i.e. one’s ability to apply the same skills to others). Through the use of Exploratory and Confirmatory Factor Analysis and Item Response Theory (Hambleton, Swaminathan, & Rogers, 1991) researchers determined that more items should be added to each scale in order to increase the reliability and improve divergent validity to the scales and clusters. Furthermore, the number of competencies on the ESCI was reduced to twelve. Those competencies include Emotional Self-Awareness, Emotional Self-Control, Adaptability, Achievement Orientation, Positive Outlook, Empathy, Organizational Awareness, Coach and Mentor, Inspirational Leadership, Influence, Conflict Management and Teamwork.

In a study of 116 participants and 1,022 raters, the ESCI competencies received a Cronbach’s Alpha Reliability ratings that ranged from .74 in Achievement Orientation and Influence to .87 in Teamwork. These data are comparable to reliability measures from 22,089 raters using the ECI-2.0 ranging from .73 in Adaptability and Conflict Management to .87 in Emotional Self-Awareness. Using a principal axis Exploratory
Factor Analysis with promax rotation (Buchanan & Seligman, 1995), researchers found that all questions loaded on the expected factor for 9 of the 12 competencies. Five of the six questions loaded on the Coach and Mentor competency and the Influence competency while four of the six questions loaded on the Achievement Orientation competency.

Sample Population

School principals and their superintendents were selected for participation in the study. These professionals were chosen from a database of schools participating in a grant through the Illinois Children’s Mental Health Partnership, The Collaborative for Academic, Social and Emotional, and the Illinois State Board of Education (ISBE). There were seventy-six sets of subjects are available for participation in the study.

Anticipated Ethical Issues

Participation in the study was completely voluntary. Respondents were not compensated in any way, nor were they individually identified as having responded. Further, the identity of each school and participant was coded to ensure confidentiality.

The researcher is an employee of one of the schools participating in the grant from the Collaborative for Academic, Social and Emotional Learning. This school, its principal and superintendent, were excluded from the study.

Data Collected and Confidentiality

All records collected for the study are kept confidential. Data is stored in a secure location available only to the researcher. These data is stored separately from consent forms and the master list of participants and corresponding codes used to link principals
and their superintendents as dependent samples. Presentations or publications of research results will exclude any personal information of the participants.

The names of participants were changed and coded with a number and letter to ensure confidentiality. The principal and his or her superintendent have a matching code from number 1 to 76. That number and the letter P was written on the top left corner of the materials mailed to the principals. Upon receipt of materials from the principals, the matching number and the letter S was written on the top left corner of the materials mailed to the superintendent.

Upon completion of the study, the participant list and corresponding codes will be destroyed. Further, all other records will be stored in a locked file and destroyed after one year.

**Data Collection Procedures**

A correlational research design was utilized for this study. Contact information for Principals participating in the Illinois Children’s Mental Health Partnership grant was obtained through a Freedom of Information Act (FOIA) request through the Illinois State Board of Education. The data collection procedures for the principals and superintendents followed a four-phase process as identified by Creswell (2003).

All principals participating in the grant were contacted in the first phase by the email (see Appendix A) explaining the purpose of the study and informing them that materials would be arriving within one week. At the same time a packet of research materials was mailed to the list of 76 principals whose schools are participating in the grant. The packet will include letter of informed consent (see Appendix C), letter of
instructions (see Appendix E), and a self-addressed, stamped envelope for return of materials to David Saxe via U.S. mail. Principals also will receive a demographic survey (see Appendix G), the Leader Form of the MLQ (see Appendix H), and the Self-assessment Questionnaire of the ESCI (see Appendix I). Because Mind garden Inc. does not allow the inclusion of the entire MLQ in the dissertation, it is instead permissible to provide five sample items from the Leader and Rater forms of the MLQ. The letter from Mind garden granting permission to use the MLQ is included in the appendices (see Appendix L). Similarly, the first five questions of the ESCI self-assessment and feedback questionnaire versions are provided in appendices I and K, respectively.

In the phase two, principals will receive an email thanking those who returned the materials and asking those who have not to please do so (see Appendix M). This email will go out two weeks after the materials are mailed as part of phase one.

In the third phase, a second mailing of materials will go out to those principals who have not yet responded. This mailing, to go out one week after the follow-up email sent as part of phase three, will consist of a second copy of all materials sent out in the initial mailing.

Phase four will include the compilation of all materials returned two weeks after the second mailing of materials. This compilation of materials was used to create the list of superintendents to be included in the study. The steps for gathering data from superintendents are described in a similar four-phase process.

Superintendents were contacted by email in phase one based upon the receipt of research materials from the principals. This email (see Appendix B) will explain the
purpose of the study and inform them that materials for the study would be arriving within one week. At the same time a packet of research materials were mailed to the list of superintendents. The packet will include letter of informed consent (see Appendix D), letter of instructions (see Appendix F), and a self-addressed, stamped envelope for return of materials to David Saxe via U.S. mail. Superintendents also will receive the Rater Form of the MLQ (see Appendix J), and the Feedback Questionnaire of the ESCI (see Appendix K).

In the second phase, superintendents will receive an email thanking those who returned the materials and asking those who have not to please do so (see Appendix N). This email will go out two weeks after the materials are mailed as part of phase one.

In the third phase, a second mailing of materials will go out to those superintendents who have not yet responded. This mailing, to go out one week after the follow-up email sent as part of phase three, will consist of a second copy of all materials sent out in the initial mailing.

Phase four will include the compilation of all materials returned two weeks after the second mailing of materials. These materials from principals and superintendents were examined and codes matched in order to link the two dependent samples. Data analysis will commence at the conclusion of phase four. Tables 4 and 5 outline the timeline of data collection for this research study.
Table 4

Timeline for Data Collection - Principals

<table>
<thead>
<tr>
<th>Phase</th>
<th>Activity</th>
<th>Timeframe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase I</td>
<td>Email principals and mail materials</td>
<td>Spring 2010</td>
</tr>
<tr>
<td>Phase II</td>
<td>Follow-up email to principals</td>
<td>2 weeks later</td>
</tr>
<tr>
<td>Phase III</td>
<td>Second mailing to principals</td>
<td>1 week later</td>
</tr>
<tr>
<td>Phase IV</td>
<td>Determine superintendent list based upon materials returned</td>
<td>2 weeks later</td>
</tr>
</tbody>
</table>

Table 5

Timeline for Data Collection - Superintendents

<table>
<thead>
<tr>
<th>Phase</th>
<th>Activity</th>
<th>Timeframe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase I</td>
<td>Email superintendents and mail materials</td>
<td>Late spring 2010</td>
</tr>
<tr>
<td>Phase II</td>
<td>Follow-up email to superintendents</td>
<td>2 weeks later</td>
</tr>
<tr>
<td>Phase III</td>
<td>Second mailing to superintendents</td>
<td>1 week later</td>
</tr>
<tr>
<td>Phase IV</td>
<td>Begin data analysis</td>
<td>2 weeks later</td>
</tr>
</tbody>
</table>

Data Analysis

PASW Statistics Version 18.0 software was used to analyze data collected. The five MLQ scales and the 12 ESCI competency scores were examined descriptively for the principal’s self-assessment and the other-rater perceptions offered by his or her superintendent. Means and standard deviations were calculated for the group of principals and superintendents.

To answer null hypotheses identified in items 1a through 1e, and 2a through 2e above, Spearman’s rho were calculated. This type of nonparametric procedure is
warranted with small sample sizes where normal distribution cannot be assumed (Moore, 2007). Further, the same type of correlation is used to assess how well the relationship between two variables is described by an arbitrary monotonic function. In this study, Spearman’s rho is used to calculate the relationship between the five transformational scales on the MLQ with each of the 12 emotional and social competency scores from the ESCI.

To answer null hypotheses identified in items 3a through 4d above, a 2 dependent samples Wilcoxon Signed Ranks Test were calculated. With large sample populations, the use of the t-test is generally employed with the assumption that the two related samples are drawn from normally distributed populations and the measures of the two samples are equal interval (Moore, 2007). This nonparametric procedure is used to compare two related samples, in this case the self-assessment and other-rater assessment of transformational leader behaviors in null hypothesis 3, and emotional and social competency in null hypothesis 4. Given the small sample size of this study and the fact that normal distribution cannot be assumed, the Wilcoxon Signed Ranks Test is an appropriate calculation to answer the research questions related to null hypotheses 3a through 4d (Corder & Foreman, 2009).

To answer null hypotheses identified in items 1f and 2f, a multiple regression analysis were used. By using this statistical procedure, the researcher will create a regression equation to determine whether a combination of variables from the ESCI predicts MLQ scores measuring leadership behaviors across the five transformational domains (Osborne, 2000). Various researchers debate the guidelines sample size needed
to create a prediction equation. The guidelines for subjects per predictor range from 15 subjects (Pedhazur, 1997) to a minimum of 40 subjects (Tabachnick & Fidell, 1996) with the goal of creating a stable regression equation (Osborne, 2000). To avoid Type I or Type II error, or over- or under-estimation, several assumptions should be met when using multiple regression (Huck, 2004; Osborne & Waters, 2002). The variables should have normal distribution, relationships between variables should be linear in nature, variables measured should be reliable, and there should be homoscedasticity where the variance of errors across all levels of independent variables is the same. Before analyses are conducted, these assumptions were examined.

Summary

This chapter outlined the methodology used in this research study, including the details of measures to be used, recruitment of participants, data collection procedures, strategies for maintaining participant confidentiality and data security, null hypotheses, and analysis of data.

The research study asked school principals to complete a demographic survey and two self-report measures assessing transformational leadership behaviors and emotional and social competencies. The principal’s superintendent completed the other-rater version of these two instruments. The researcher used descriptive statistics, Spearman’s rho, Wilcoxon Signed Rank Tests and multiple regression analysis to explore the relationship between participant responses in these constructs.
CHAPTER IV
RESULTS

The primary purpose of this study is to examine the predictive relationship between the emotional and social competence and transformational leadership style of school principals. The first set of research questions seeks to identify whether there exists a relationship, via self-assessment, between the principal’s transformational leader behaviors and their emotional and social competencies. The second set of research questions involves an examination of the relationship between the superintendent’s assessment of the principal’s use of transformational leader behaviors and their perception/assessment of the principal’s emotional and social competencies. For the third set of research questions, the principal’s self-assessment of transformational leader behaviors is compared to the superintendent’s assessment of the principal’s use of transformational leader behaviors to determine if there is a difference between the variables. The fourth and final set of research questions asks to determine whether there is a difference between the principal’s self-assessment of emotional and social competence and the superintendent’s assessment of the principal’s emotional and social competence.

Several null hypotheses were tested to answer each of the four research questions. The current chapter presents the results of statistical analyses carried out by the researcher to answer those research questions. Following the careful collection and
coding of data, and the entry of those data into PASW Statistics Version 18.0, descriptive statistics were calculated for each of the variables of interest. Descriptive statistics related to the demographic survey of principals are included in Table 6.

Of the principals who responded, 12 were male and eight were female. Four of the respondents possess a doctoral degree while 16 have a master’s degree. Five of the principals work with students in grades 9-12, while the other 15 principals work with students in grades ranging from pre-school through grade eight. These individuals average 42 years of age, with eight years of administrative experience and four years in their current position. There is a wide range of enrollments in the schools the principals lead, along with a wide range in the number of schools in the districts that employ the principals, with an average of 623 students in their school and 68 schools in the district, respectively. On average, the principals responding had worked for three years with their current superintendent.

As the sample size turned out to be very small with only 20 principals and 11 superintendents responding, nonparametric correlational analysis was undertaken according to the rule of thumb (Cohen & Cohen, 1975). As stated on p.96, this was accomplished using Spearman’s rho to examine the bivariate relationships among relevant variables for null hypotheses 1a through 1e, and 2a through 2e. For the same reason, a nonparametric version of two-dependent samples t-test was calculated using a Wilcoxon Signed Ranks test to answer null hypotheses 3a through 3d, and 4a through 4d. To determine the predictive relationships among variables, multiple regression analyses were computed for null hypotheses 1f and 2f.
Table 6

Descriptive Statistics for Demographic Survey of Principals

<table>
<thead>
<tr>
<th>Gender</th>
<th>Degree</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>12 Masters</td>
<td>16 Pre K-8</td>
</tr>
<tr>
<td>Female</td>
<td>8 Doctorate</td>
<td>4 Grade 9-12</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>32</td>
<td>57</td>
<td>42.60</td>
<td>7.83</td>
</tr>
<tr>
<td>Years</td>
<td>2</td>
<td>23</td>
<td>8.20</td>
<td>5.69</td>
</tr>
<tr>
<td>Position</td>
<td>1</td>
<td>16</td>
<td>4.05</td>
<td>3.30</td>
</tr>
<tr>
<td>Enroll</td>
<td>155</td>
<td>1830</td>
<td>623.55</td>
<td>439.22</td>
</tr>
<tr>
<td>Schools</td>
<td>1</td>
<td>650</td>
<td>68.50</td>
<td>198.88</td>
</tr>
<tr>
<td>Work</td>
<td>1</td>
<td>6</td>
<td>3.05</td>
<td>1.43</td>
</tr>
</tbody>
</table>

*Note. Total = 20. Degree = Highest Degree Held, Level = Grade Range of Students in School, Years = Years of Administrative Experience, Position = Years in Current Position, Enroll = Number of Students in School, Schools = Number of Schools in District, Work = Number of Years Worked with Superintendent.*

**Research Question 1**

What is the relationship between the principal’s self-assessment of transformational leader behaviors and the principal’s emotional and social competencies?

There are six null hypotheses examined to answer the first research question. The Spearman’s rho correlation coefficients for answering null hypotheses 1a through 1e are presented in Table 7. The results of each regression equation related to null hypothesis 1f are displayed in Table 8, including the total R-squared, Beta, Standard Error of Beta, and t-values. Null hypotheses 1a through 1f were stated as follows:
1a. There is no relationship between the use of Attributed Idealized Influence as measured by the MLQ (5X-Short) and the emotional and social competencies of principals as measured by the ESCI (Version 3.0).

1b. There is no relationship between the use of Behavioral Idealized Influence as measured by the MLQ and the emotional and social competencies of principals as measured by the ESCI.

1c. There is no relationship between the use of Inspirational Motivation as measured by the MLQ and the emotional and social competencies of principals as measured by the ESCI.

1d. There is no relationship between the use of Intellectual Stimulation as measured by the MLQ and the emotional and social competencies of principals as measured by the ESCI.

1e. There is no relationship between the use of Individualized Consideration as measured by the MLQ and the emotional and social competencies of principals as measured by the ESCI.

1f. There is no relationship between any of the dimensions of Transformational Leadership as measured by the MLQ and any combination of the competencies or clusters of competencies as measured by the ESCI.

Based upon statistical analysis, each of the null hypotheses 1a through 1e were rejected in that a significant correlation ($p<.05$) was found between each of the five domains of transformational leadership as measured by the MLQ, and one or more of the
emotional and social competencies as measured by the ESCI. These findings are explained in greater detail below.

With respect to null hypothesis 1a, the principal’s self-assessment of the use of Attributed Idealized Influence as measured by the MLQ was positively correlated with the Relationship Management Cluster of the ESCI ($r=.800, p<.001$), but not with Self-Awareness, Self-Management, or Social Awareness. Through a deeper exploration of the Relationship Management Cluster, the principal’s use of the ESCI competencies of Influence ($r=.765, p<.001$), and Inspirational Leadership ($r=.782, p<.001$), but not Conflict Management, Coach and Mentor, or Teamwork, were positively correlated with use of Attributed Idealized Influence.

Results for null hypothesis 1b showed that the principal’s self-assessment of the use of Behavioral Idealized Influence was positively correlated with the Self-Management ($r=.842, p<.001$), and Social Awareness ($r=.708, p<.001$). Of the competencies that make up the Self-Management cluster, Achievement Orientation ($r=.736, p<.001$), Adaptability ($r=.814, p<.001$), and Positive Outlook ($r=.732, p<.001$) were positively correlated with the use of Behavioral Idealized Influence, while Emotional Self-Control was not. Further exploration of the Social Awareness cluster revealed that Organizational Awareness ($r=.726, p<.001$), and not Empathy, was positively correlated with the use of Behavioral Idealized Influence.
Table 7

Spearman’s \( \rho \) Correlations among Principal Variables

<table>
<thead>
<tr>
<th></th>
<th>PIA</th>
<th>PIB</th>
<th>PIM</th>
<th>PIS</th>
<th>PIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>SA</td>
<td>.569**</td>
<td>.651**</td>
<td>.630**</td>
<td>.362</td>
<td>.401</td>
</tr>
<tr>
<td>SO</td>
<td>.642**</td>
<td>.708**</td>
<td>.741**</td>
<td>.634**</td>
<td>.552*</td>
</tr>
<tr>
<td>EM</td>
<td>.630**</td>
<td>.591**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OA</td>
<td>.726***</td>
<td>.783***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SM</td>
<td>.679**</td>
<td>.842**</td>
<td>.548*</td>
<td>.646**</td>
<td>.631**</td>
</tr>
<tr>
<td>AO</td>
<td>.736***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AD</td>
<td>.814***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ES</td>
<td>.112</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PO</td>
<td>.732***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RM</td>
<td>.800***</td>
<td>.677**</td>
<td>.627**</td>
<td>.782**</td>
<td>.830**</td>
</tr>
<tr>
<td>CM</td>
<td>.535*</td>
<td></td>
<td>.447*</td>
<td>.483*</td>
<td></td>
</tr>
<tr>
<td>CO</td>
<td>.597**</td>
<td></td>
<td>.583**</td>
<td>.659**</td>
<td></td>
</tr>
<tr>
<td>IN</td>
<td>.765***</td>
<td></td>
<td>.758***</td>
<td>.779***</td>
<td></td>
</tr>
<tr>
<td>IL</td>
<td>.782***</td>
<td></td>
<td>.806***</td>
<td>.831***</td>
<td></td>
</tr>
<tr>
<td>TM</td>
<td>.679**</td>
<td></td>
<td>.815***</td>
<td>.747**</td>
<td></td>
</tr>
</tbody>
</table>

Note. Total = 20. PIA = Principal Attributed Idealized Influence, PIB = Principal Behavioral Idealized Influence, PIM = Principal Inspirational Motivation, PIS = Principal Intellectual Stimulation, PIC = Principal Individualized Consideration, PSA = Principal Self-Awareness, PSO = Principal Social Awareness, PEM = Principal Empathy, POA = Principal Organizational Awareness, PSM = Principal Self-Management, PAO = Principal Achievement Orientation, PAD = Principal Adaptability, PES = Principal Emotional Self-Control, PPO = Principal Positive Outlook, PRM = Principal Relationship Management, PCM = Principal Conflict Management, PCO = Principal Coach and Mentor, PIN = Principal Influence, PTM = Principal Teamwork.

*\( p < .05 \), **\( p < .01 \), ***\( p < .001 \).

The statistical analysis related to null hypothesis 1c showed a positive correlation between the principal’s use of Inspirational Motivation from the MLQ, and Social Awareness from the ESCI (\( r = .741, p < .001 \)). A deeper examination of the Social
Awareness cluster showed that Organizational Awareness \((r = .783, p < .001)\) was positively correlated with the principal’s use of Inspirational Motivation while again, Empathy was not.

Similar to null hypothesis 1a, results for 1d and 1e showed the principal’s use of Intellectual Stimulation \((r = .782, p < .001)\) and Individualized Consideration \((r = .830, p < .001)\) were positively correlated with the Relationship Management cluster from the ESCI. When the competencies that make up the Relationship Management cluster were analyzed relative to both of these domains of Transformational Leadership, Influence \((r = .758, p < .001; r = .779, p < .001)\), Inspirational Leadership \((r = .806, p < .001; r = .831, p < .001)\), and Teamwork \((r = .815, p < .001; r = .747, p < .001)\) were positively correlated with both domains.

To answer null hypothesis 1f, multiple regression equations were calculated to determine whether a combination of variables from the ESCI clusters predicts MLQ scores measuring leadership behaviors across the five transformational domains. Each transformational leadership domain was examined separately. Additional regression analyses were run on the competencies that constitute a particular ESCI cluster when that cluster was found to significantly predict a transformational leadership domain. The results of each regression analysis are displayed in Table 8, including the total R-squared for the model, F-values, regression coefficient (Beta), standard error, and t-value for each included variable. The scatter plot diagrams for each regression model are included in Figures 2 through 11 to check the homogeneity assumption. A review of these diagrams reveals no violation of the assumption of homogeneity. Based upon the regression
analysis, null hypothesis 1f is rejected in that one or more of the social and emotional clusters and competencies of the ESCI were found to predict four of the five domains of transformational leadership behaviors.

**Attributed Idealized Influence.** In the first regression equation, the four ESCI clusters of Self-Awareness, Self-Management, Social Awareness and Relationship Skills accounted for 48.3% of the variance in the dependent variable Attributed Idealized Influence from the MLQ ($F=5.341, p<.01$). None of the four ESCI clusters were a significant predictor of Attributed Idealized Influence for the current sample of principals.

**Behavioral Idealized Influence.** In the second regression analysis, 62.6% of the variance in the dependent variable Behavioral Idealized Influence is explained by the four ESCI clusters ($F=8.941, p <.005$). Both the ESCI Self-Management ($b =-.044, p <.05$) and Social Awareness ($b =.300, p <.05$) clusters significantly predict the Behavioral Idealized Influence of the current sample.

To drill down deeper into the two ESCI clusters that significantly predict the principal’s use of Behavioral Idealized Influence, two additional regression analyses were run. In the third, the four competencies that make up the Self-Management cluster explain 70.1% of the variance in this transformational leadership domain ($F=12.138, p <.001$). Of the four competencies, Adaptability ($b =.805, p<.01$) significantly predicts Behavioral Idealized Influence while Achievement Orientation, Emotional Self-Control, and Positive Outlook do not.
Table 8

Summary of Multiple Regression Analyses Predicting Principal’s Self-Assessment of Transformational Leadership

**Dependent Variables**

<table>
<thead>
<tr>
<th>Regression Equation 1</th>
<th>Dependent Variable: Attributed Idealized Influence</th>
<th>F=5.431</th>
<th>Total R²=.592</th>
</tr>
</thead>
<tbody>
<tr>
<td>Predictors:</td>
<td>B</td>
<td>SEB</td>
<td>Beta</td>
</tr>
<tr>
<td>Self-Awareness</td>
<td>-.104</td>
<td>.209</td>
<td>-.126</td>
</tr>
<tr>
<td>Social Awareness</td>
<td>.323</td>
<td>.332</td>
<td>.300</td>
</tr>
<tr>
<td>Self-Management</td>
<td>-.061</td>
<td>.440</td>
<td>-.044</td>
</tr>
<tr>
<td>Relationship Management</td>
<td>.899</td>
<td>.459</td>
<td>.645</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Regression Equation 2</th>
<th>Dependent Variable: Behavioral Idealized Influence</th>
<th>F=8.941</th>
<th>Total R²=.705</th>
</tr>
</thead>
<tbody>
<tr>
<td>Predictors:</td>
<td>B</td>
<td>SEB</td>
<td>Beta</td>
</tr>
<tr>
<td>Self-Awareness</td>
<td>.018</td>
<td>.140</td>
<td>.027</td>
</tr>
<tr>
<td>Social Awareness</td>
<td>.492</td>
<td>.222</td>
<td>.582</td>
</tr>
<tr>
<td>Self-Management</td>
<td>.668</td>
<td>.293</td>
<td>.611</td>
</tr>
<tr>
<td>Relationship Management</td>
<td>-.384</td>
<td>.306</td>
<td>-.351</td>
</tr>
</tbody>
</table>
Regression Equation 3  
Dependent Variable: Behavioral Idealized Influence  
\[ F = 12.138 \quad \text{Total } R^2 = .764 \]

<table>
<thead>
<tr>
<th>Predictors</th>
<th>B</th>
<th>SEB</th>
<th>Beta</th>
<th>t-value</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Achievement Orientation</td>
<td>-.087</td>
<td>.170</td>
<td>-.108</td>
<td>-.511</td>
<td>.617</td>
</tr>
<tr>
<td>Adaptability</td>
<td>.608</td>
<td>.140</td>
<td>.805</td>
<td>4.345</td>
<td>.001</td>
</tr>
<tr>
<td>Emotional Self-Control</td>
<td>.005</td>
<td>.123</td>
<td>.006</td>
<td>.044</td>
<td>.965</td>
</tr>
<tr>
<td>Positive Outlook</td>
<td>.179</td>
<td>.190</td>
<td>.207</td>
<td>.943</td>
<td>.360</td>
</tr>
</tbody>
</table>

Regression Equation 4  
Dependent Variable: Behavioral Idealized Influence  
\[ F = 13.046 \quad \text{Total } R^2 = .605 \]

<table>
<thead>
<tr>
<th>Predictors</th>
<th>B</th>
<th>SEB</th>
<th>Beta</th>
<th>t-value</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Empathy</td>
<td>.198</td>
<td>.237</td>
<td>.227</td>
<td>.836</td>
<td>.415</td>
</tr>
<tr>
<td>Organizational Awareness</td>
<td>.436</td>
<td>.204</td>
<td>.580</td>
<td>2.137</td>
<td>.047</td>
</tr>
</tbody>
</table>

Regression Equation 5  
Dependent Variable: Inspirational Motivation  
\[ F = 5.646 \quad \text{Total } R^2 = .601 \]

<table>
<thead>
<tr>
<th>Predictors</th>
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<th>Beta</th>
<th>t-value</th>
<th>Sig.</th>
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<tr>
<td>Self-Awareness</td>
<td>-.219</td>
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<td>-.283</td>
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<td>.278</td>
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<tr>
<td>Social Awareness</td>
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<td>Self-Management</td>
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<td>.276</td>
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<td>.527</td>
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Regression Equation 6
Dependent Variable: Inspirational Motivation

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F=14.209  Total R²=.626

Regression Equation 7
Dependent Variable: Intellectual Stimulation

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F=6.534  Total R²=.635

Regression Equation 8
Dependent Variable: Intellectual Stimulation

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<td>Influence</td>
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<td>.315</td>
<td>.263</td>
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<td>.435</td>
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<tr>
<td>Inspirational Leadership</td>
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<td>.083</td>
<td>.176</td>
<td>.863</td>
</tr>
<tr>
<td>Teamwork</td>
<td>.495</td>
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<td>.354</td>
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<td>.375</td>
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F=3.204  Total R²=.534
### Regression Equation 9

**Dependent Variable: Individualized Consideration**

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**F** = 11.804  
**Total $R^2$ = .759**

### Regression Equation 10

**Dependent Variable: Individualized Consideration**

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<td>Coach and Mentor</td>
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<tr>
<td>Influence</td>
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<td>.068</td>
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<td>.794</td>
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<tr>
<td>Inspirational Leadership</td>
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<td>Teamwork</td>
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<td>-.037</td>
<td>-.124</td>
<td>.903</td>
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</table>

**F** = 7.021  
**Total $R^2$ = .715**

*Note. Total = 20.*
Figure 2. Scatter Plot of Regression Equation 1: ESCI Clusters as Predictor of Principal’s Self-Assessment of Attributed Idealized Influence

Figure 3. Scatter Plot of Regression Equation 2: ESCI Clusters as Predictor of Principal’s Self-Assessment of Behavioral Idealized Influence
**Figure 4.** Scatter Plot of Regression Equation 4: ESCI Self-Management Competencies as Predictor of Principal’s Self-Assessment of Behavioral Idealized Influence

**Figure 5.** Scatter Plot of Regression Equation 3: ESCI Social-Awareness Competencies as Predictor of Principal’s Self-Assessment of Behavioral Idealized Influence
Figure 6. Scatter Plot of Regression Equation 5: ESCI Clusters as Predictor of Principal’s Self-Assessment of Inspirational Motivation

Figure 7. Scatter Plot of Regression Equation 6: ESCI Social-Awareness Competencies as Predictor of Principal’s Self-Assessment of Inspirational Motivation
Figure 8. Scatter Plot of Regression Equation 7: ESCI Clusters as Predictor of Principal’s Self-Assessment of Intellectual Stimulation

Figure 9. Scatter Plot of Regression Equation 8: ESCI Relationship Management Competencies as Predictor of Principal’s Self-Assessment of Intellectual Stimulation
Figure 10. Scatter Plot of Regression Equation 9: ESCI Clusters as Predictor of Principal’s Self-Assessment of Individualized Consideration

Figure 11. Scatter Plot of Regression Equation 10: ESCI Relationship Management Competencies as Predictor of Principal’s Self-Assessment of Individualized Consideration
The fourth regression analysis shows that the competencies that comprise the Social Awareness cluster, Organizational Awareness and Empathy, explain 55.9% of the variance in Behavioral Idealized Influence ($F=13.046, p < .001$). Results here indicate that Organizational Awareness ($b = .580, p < .05$) predicts Behavioral Idealized Influence while Empathy does not.

**Inspirational Motivation.** In the fifth regression analysis, the four ESCI clusters accounted for 49.4% of the variance in the dependent variable Inspirational Motivation from the MLQ ($F=5.646, p < .01$). The Social Awareness cluster ($b = .728, p < .05$) from the ESCI is a significant predictor of Inspirational Motivation.

The sixth regression equation shows that the competencies that comprise the Social Awareness cluster, Organizational Awareness and Empathy, explain 58.2% of the variance in Behavioral Idealized Influence ($F=14.209, p < .001$). Similar to findings related to the principal’s use of Behavioral Idealized Influence, results here indicate that Organizational Awareness ($b = .927, p < .01$) predicts Inspirational Motivation while Empathy does not.

**Intellectual Stimulation.** In the seventh regression analysis, 53.8% of the variance in the dependent variable Intellectual Stimulation is explained by the four ESCI clusters ($F=6.534, p < .005$). The Relationship Management cluster ($b = .858, p < .05$) significantly predicts the Intellectual Stimulation of the current sample of principals.

To further explore the Relationship Management cluster as a predictor of Intellectual Stimulation, an eighth regression analysis was run. This regression analysis shows that the competencies that comprise the Relationship Management, that is Conflict
Management, Coach and Mentor, Influence, Inspirational Leadership and Teamwork, explain 53.4% of the variance in Behavioral Idealized Influence ($F=3.204$, $p < .05$). None of the five competencies that comprise the Relationship Management cluster were a significant predictor of Intellectual Stimulation for the current sample of principals.

**Individualized Consideration.** In the ninth regression analysis, 69.5% of the variance in the dependent variable Individualized Consideration is explained by the four ESCI clusters ($F=11.804$, $p < .001$). The Relationship Management cluster ($b =1.167$, $p < .001$) significantly predicts the Individualized Consideration of the current sample of principals.

To further explore the Relationship Management cluster as a predictor of Individualized Consideration, an tenth regression analysis was run. The result shows that the competencies that comprise the Relationship Management cluster explain 61.3% of the variance in Behavioral Idealized Influence ($F=7.021$, $p < .005$). None of the five competencies that comprise the Relationship Management cluster were a significant predictor of Individualized Consideration for the current sample of principals.

**Research Question 2**

*What is the relationship between the superintendent’s assessment of the principal’s transformational leader behaviors and the superintendent’s assessment of the principal’s emotional and social competencies?*

There are six null hypotheses examined to answer the second set of research questions. The Spearman’s rho correlations coefficients for null hypotheses 2a through 2e
are presented in Table 9. The results of each regression analysis related to null hypothesis 2f are displayed in Table 10. Null hypotheses 2a through 2f were stated as follows:

2a. There is no relationship between the superintendent’s assessment of the principal’s use of Attributed Idealized Influence as measured by the MLQ and superintendent’s assessment of the principal’s emotional and social competencies as measured by the ESCI.

2b. There is no relationship between the superintendent’s assessment of the principal’s use of Behavioral Idealized Influence as measured by the MLQ and superintendent’s assessment of the principal’s emotional and social competencies as measured by the ESCI.

**Behavioral Idealized Influence.** In the second regression analysis, 62.6% of the variance in the dependent variable Behavioral Idealized Influence is explained by the four ESCI clusters ($F = 8.941, p < .005$). Both the ESCI Self-Management ($b = -.044, p < .05$) and Social Awareness ($b = .300, p < .05$) clusters significantly predict the Behavioral Idealized Influence of the current sample.

2d. There is no relationship between the superintendent’s assessment of the principal’s use of Intellectual Stimulation as measured by the MLQ and superintendent’s assessment of the principal’s emotional and social competencies as measured by the ESCI.
Table 9

*Spearman’s $\rho$ Correlations among Superintendent Variables*

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<tr>
<th></th>
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<th>SIB</th>
<th>SIM</th>
<th>SIS</th>
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<td>.381</td>
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<td>SEM</td>
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<td>SOA</td>
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<tr>
<td>SIL</td>
<td>.760**</td>
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<tr>
<td>STM</td>
<td>.774**</td>
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</table>

2e. There is no relationship between the superintendent’s assessment of the principal’s use of Individualized Consideration as measured by the MLQ and superintendent’s assessment of the principal’s emotional and social competencies as measured by the ESCI.

2f. There is no relationship between the superintendent’s assessment of the principal’s use of any of the dimensions of Transformational Leadership as measured by the MLQ and the superintendent’s assessment of the principal’s use of any combination of the competencies or clusters of competencies as measured by the ESCI.

With respect to null hypothesis 2a, the superintendent’s assessment of the principal’s use of Attributed Idealized Influence as measured by the MLQ was positively correlated with the Self-Management cluster (\(r = .780, p < .01\)), the Social Awareness cluster (\(r = .784, p < .01\)), and the Relationship Management Cluster (\(r = .849, p < .005\)) of the ESCI (\(r = .800, p < .001\)). Therefore, hypothesis 2a is rejected.

Each of these three clusters was explored further through statistical analysis. One of the competencies from the Self-Management cluster, Achievement Orientation (\(r = .745, p < .01\)), was positively correlated with Attributed Idealized Influence. Both of the competencies that make up the Social Awareness cluster, Empathy (\(r = .741, p < .01\)) and Organizational Awareness (\(r = .765, p < .01\)) correlated positively with this transformational leadership domain. Regarding the Relationship Management Cluster, three of the five competencies were positively correlated with Attributed Idealized Influence. Those include Coach and Mentor (\(r = .709, p < .05\)), Inspirational Leadership (\(r = .760, p < .01\)), and Teamwork (\(r = .774, p < .01\)).
No statistically significant correlations were found between the superintendent’s assessment of the principal’s use of any of the remaining four transformation leader behaviors and any of the four social and emotional clusters from the ESCI. As such, null hypotheses 2b through 2e are accepted.

To answer null hypothesis 2f, multiple regression analyses were calculated to determine whether a combination of variables from the ESCI clusters predicts MLQ scores measuring leadership behaviors across the five transformational domains. Each transformational leadership domain was examined separately. Additional regression analyses were run on the competencies that constitute an ESCI cluster when the cluster was found to significantly predict a transformational leadership domain. The results of each regression analysis are displayed in Table 10, including the total R-squared for the model, F-values, regression coefficient (Beta), standard error, and t-value for each included variable. The scatter plot diagrams for each regression model are included in Figure 12 through 17 to check the homogeneity assumption. Once again, a review of these diagrams reveals no violation of the assumption of homogeneity. Based upon the regression analysis, null hypothesis 2f is rejected in that one of the social and emotional clusters of the ESCI was found to predict one of the five domains of transformational leadership behaviors.

**Attributed Idealized Influence.** In the first regression analysis, the four ESCI clusters of Self-Awareness, Self-Management, Social Awareness and Relationship Skills accounted for 39.2% of the variance in the dependent variable Attributed Idealized Influence from the MLQ \( F = 2.613, p > .05 \). None of the four ESCI clusters were a
significant predictor of the principal’s use of Attributed Idealized Influence as assessed by the current sample of superintendents.

**Behavioral Idealized Influence.** In the second regression analysis, 55.9% of the variance in the dependent variable Behavioral Idealized Influence is explained by the four ESCI clusters ($F = 4.174, p > .05$). None of the four ESCI clusters were a significant predictor of the principal’s use of Behavioral Idealized Influence as assessed by the current sample of superintendents.

**Inspirational Motivation.** In the third regression analysis, the four ESCI clusters accounted for 60.8% of the variance in the dependent variable Inspirational Motivation from the MLQ ($F = 4.878, p < .05$). The Self-Management cluster ($b = 1.960, p < .01$) from the ESCI is a significant predictor of Inspirational Motivation.

The fourth regression analysis shows that the competencies that comprise the Self-Management cluster explain 5.3% of the variance in Inspirational Motivation ($F = 1.141, p > .05$). None of the four competencies that comprise the Self-Management cluster were a significant predictor of the superintendent’s assessment of the principal’s use of Inspirational Motivation.

**Intellectual Stimulation.** In the fifth regression analysis, 3.5% of the variance in the dependent variable Intellectual Stimulation is explained by the four ESCI clusters ($F = 1.091, p > .05$). None of the four ESCI clusters were a significant predictor of the principal’s use of Intellectual Stimulation as assessed by the current sample of superintendents.
Table 10

Summary of Multiple Regression Analyses Predicting Superintendent’s Assessment of Principal’s Transformational Leadership

**Dependent Variables**

<table>
<thead>
<tr>
<th>Regression Equation 1</th>
<th>Dependent Variable: Attributed Idealized Influence</th>
<th>F=2.613</th>
<th>Total R²=.635</th>
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<td>Beta</td>
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<td>Self-Awareness</td>
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<td>.307</td>
<td>.192</td>
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<td>Social Awareness</td>
<td>-.277</td>
<td>.774</td>
<td>-.431</td>
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<tr>
<td>Relationship Management</td>
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</tbody>
</table>

<table>
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<th>Dependent Variable: Behavioral Idealized Influence</th>
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<th>Total R²=.736</th>
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**Dependent Variable: Inspirational Motivation**

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F=4.878, Total $R^2=.765$

### Regression Equation 4
**Dependent Variable: Inspirational Motivation**

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F=1.141, Total $R^2=.432$

### Regression Equation 5
**Dependent Variable: Intellectual Stimulation**

<table>
<thead>
<tr>
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<th>B</th>
<th>SEB</th>
<th>Beta</th>
<th>t-value</th>
<th>Sig.</th>
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<tr>
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<td>.858</td>
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<td>.238</td>
<td>.820</td>
</tr>
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F=1.091, Total $R^2=.421$
Regression Equation 6
Dependent Variable: Individualized Consideration

<table>
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<th>B</th>
<th>SEB</th>
<th>Beta</th>
<th>t-value</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
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<td>.318</td>
<td>.565</td>
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<td>.339</td>
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<tr>
<td>Social Awareness</td>
<td>-1.531</td>
<td>.804</td>
<td>-2.523</td>
<td>-1.906</td>
<td>.105</td>
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<tr>
<td>Self-Management</td>
<td>1.163</td>
<td>.611</td>
<td>1.213</td>
<td>1.903</td>
<td>.106</td>
</tr>
<tr>
<td>Relationship Management</td>
<td>1.049</td>
<td>.766</td>
<td>1.370</td>
<td>1.369</td>
<td>.220</td>
</tr>
</tbody>
</table>

*Note. Total = 11.*
Figure 12. Scatter Plot of Regression Equation 3: ESCI Clusters as Predictor of Superintendent’s Assessment of Principal’s Attributed Idealized Influence

Figure 13. Scatter Plot of Regression Equation 3: ESCI Clusters as Predictor of Superintendent’s Assessment of Principal’s Behavioral Idealized Influence
Figure 14. Scatter Plot of Regression Equation 3: ESCI Clusters as Predictor of Superintendent’s Assessment of Principal’s Inspirational Motivation

Figure 15. Scatter Plot of Regression Equation 3: ESCI Self-Management Competencies as Predictor of Superintendent’s Assessment of Principal’s Inspirational Motivation
Figure 16. Scatter Plot of Regression Equation 3: ESCI Clusters as Predictor of Superintendent’s Assessment of Principal’s Intellectual Stimulation

Figure 17. Scatter Plot of Regression Equation 3: ESCI Clusters as Predictor of Superintendent’s Assessment of Principal’s Individualized Consideration
**Individualized Consideration.** In the sixth regression analysis, 26.8% of the variance in the dependent variable Intellectual Stimulation is explained by the four ESCI clusters \((F=1.913, p > .05)\). Once again, none of the four ESCI clusters were a significant predictor of principal’s use of Individualized Consideration as assessed by the current sample of superintendents.

**Research Question 3**

*What is the relationship between the principal’s self-assessment of transformational leader behaviors relative to the superintendent’s assessment of the principal’s transformational leader behaviors?*

There are five null hypotheses examined to answer the third set of research questions. The means, standard deviations, and Wilcoxon Signed Rank Test results for null hypotheses 3a through 3e are presented in Table 11. Null hypotheses 3a through 3e were stated as follows:

3a. There is no difference between self-assessment and other-rater assessment of the use of Attributed Idealized Influence as measured by the MLQ.

3b. There is no difference between self-assessment and other-rater assessment of the use of Behavioral Idealized Influence as measured by the MLQ.

3c. There is no difference between self-assessment and other-rater assessment of the use of Inspirational Motivation as measured by the MLQ.

3d. There is no difference between self-assessment and other-rater assessment of the use of Intellectual Stimulation as measured by the MLQ.
3e. There is no difference between self-assessment and other-rater assessment of the use of Individualized Consideration as measured by the MLQ.

Table 11

Means, Standard Deviations, and Non-Parametric Correlations for MLQ

Transformational Leadership Variables

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
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<tbody>
<tr>
<td>PIA</td>
<td>20</td>
<td>3.39</td>
<td>.516</td>
</tr>
<tr>
<td>SIA</td>
<td>11</td>
<td>3.48</td>
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<tr>
<td>PIB</td>
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<td>3.56</td>
<td>.405</td>
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<td>SIB</td>
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<td>3.43</td>
<td>.476</td>
</tr>
<tr>
<td>PIM</td>
<td>20</td>
<td>3.55</td>
<td>.484</td>
</tr>
<tr>
<td>SIM</td>
<td>11</td>
<td>3.36</td>
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<tr>
<td>PIS</td>
<td>20</td>
<td>3.41</td>
<td>.438</td>
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<tr>
<td>SIS</td>
<td>11</td>
<td>2.93</td>
<td>.434</td>
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<tr>
<td>PIC</td>
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<td>.433</td>
</tr>
<tr>
<td>SIC</td>
<td>11</td>
<td>3.05</td>
<td>.416</td>
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Non-Parametric Correlations

<table>
<thead>
<tr>
<th></th>
<th>SIA-PIA</th>
<th>SIB-PIB</th>
<th>SIM-PIM</th>
<th>SIS-PIS</th>
<th>SIC-PIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Z</td>
<td>-.768</td>
<td>-.703</td>
<td>-2.169</td>
<td>-2.507</td>
<td>-2.203</td>
</tr>
<tr>
<td>Sig.</td>
<td>.443</td>
<td>.482</td>
<td>.030</td>
<td>.012</td>
<td>.028</td>
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</table>

Results of the statistical analysis show that null hypotheses 3a and 3b are accepted. There is no statistical difference between the self-assessment and other-rater assessment of the principal’s use of Attributed Idealized Influence ($Z = -.768, p = .443$)
and Behavioral Idealized Influence ($Z = -.703, p = .482$). Null hypotheses 3c, 3d, and 3e are rejected in that principal’s self-assessment of the use of Inspirational Motivation ($Z = -2.169, p = .030$), Intellectual Stimulation ($Z = -2.507, p = .012$), and Individualized Consideration ($Z = -2.203, p = .028$) is significantly greater than the superintendent’s assessment of the principal’s use of these transformational leader behaviors.

**Research Question 4**

*What is the relationship between the principal’s self-assessment of social and emotional competency relative to the superintendent’s assessment of the principal’s social and emotional competency?*

There are four null hypotheses examined to answer the fourth set of research questions. The means, standard deviations, and Wilcoxon Signed Rank Test results for null hypotheses 4a through 4d are presented in Table 12. Null hypotheses 4a through 4d were stated as follows:

4a. There is no difference between self-assessment and other-rater assessment of the principals’ self-awareness as measured by the ESCI.

4b. There is no difference between self-assessment and other-rater assessment of the principals’ self-management as measured by the ESCI.

4c. There is no difference between self-assessment and other-rater assessment of the principals’ social awareness as measured by the ESCI.

4d. There is no difference between self-assessment and other-rater assessment of the principals’ relationship management as measured by the ESCI.
Results of the statistical analysis show that null hypotheses 4a and 4d are accepted. There is no statistical difference between the self-assessment and other-rater assessment of the principal’s use of Self-Awareness ($Z=-1.362, p=.173$), Self-Management ($Z=-1.379, p=.108$), Social Awareness ($Z=-1.607, p=.168$), or Relationship Management ($Z=-1.689, p=.108$).

Table 12

*Means, Standard Deviations, and Non-Parametric Correlations for ESCI Variables*

<table>
<thead>
<tr>
<th>Descriptive Statistics</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
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<tr>
<td>PSA</td>
<td>20</td>
<td>4.12</td>
<td>.626</td>
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<td>SSA</td>
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<td>3.68</td>
<td>.710</td>
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<td>PSM</td>
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<td>4.41</td>
<td>.370</td>
</tr>
<tr>
<td>SSM</td>
<td>11</td>
<td>4.20</td>
<td>.434</td>
</tr>
<tr>
<td>PRM</td>
<td>20</td>
<td>4.39</td>
<td>.370</td>
</tr>
<tr>
<td>SSM</td>
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<td>4.07</td>
<td>.542</td>
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</table>

<table>
<thead>
<tr>
<th>Non-Parametric Correlations</th>
<th>SSA-PSA</th>
<th>SSO-PSO</th>
<th>SSM-PSM</th>
<th>SRM-PRM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Z</td>
<td>-1.362</td>
<td>-1.607</td>
<td>-1.379</td>
<td>-1.607</td>
</tr>
<tr>
<td>Sig.</td>
<td>.173</td>
<td>.108</td>
<td>.168</td>
<td>.108</td>
</tr>
</tbody>
</table>
Summary

Results of the data analysis reveal a statistically significant correlation between the principal’s self-assessment of each of the five domains of transformational leadership and at least one of the ESCI clusters and one or more of the competencies that comprise that cluster. When the superintendent’s ratings of the principal’s transformational leadership abilities and emotional and social competencies are compared statistically, just one of the five transformational leadership domains correlates with the ESCI. More specifically, significant correlations were found between this transformational leadership domain and three of the four ESCI clusters and six of the ESCI competencies that comprise those clusters.

Based upon the regression analysis of principal’s self-assessment data, one or more of the social and emotional clusters and/or competencies of the ESCI were found to predict four of the five domains of transformational leadership. Regression analysis of the superintendent’s rating of the principal’s transformational leadership and emotional and social competence suggests that one of the ESCI clusters predicts one of the five domains of transformational leadership.

Further statistical analysis of self-assessment data and other-rater assessment data related to transformational leadership behaviors suggests no difference in ratings for two of the five domains. Also, no difference in ratings was found between self-assessment and other-rater assessment for each of the four ESCI clusters.
CHAPTER V
DISCUSSION

Overview

This chapter provides an overview of research methods, a summary of the research findings, and links between this study and related literature. Also considered in this chapter are the limitations of the current study along with recommendations for future research.

Summary of Rationale and Research Methods

The success or failure of a school and its students often hinges on the effectiveness of leadership. Leadership is a catalyst for reform efforts by involving all stakeholders in student achievement and offering all students opportunities for engagement and success (Hopkins, 2006).

Among the myriad leadership theories posed and studied since the early 1900’s transformational leadership relates directly in many respects to the need for school reform sought by No Child Left Behind. Through Idealized Influence, Inspirational Motivation, Intellectual Stimulation, and Individualized Consideration, transformational leaders create a followership that views work from a new perspective, commits to the vision and mission of the organization, and reaches its fullest potential.

A growing body of research considers the antecedents to transformational leadership. Among these studies there is evidence to suggest that the emotional and social
competencies of the leader are related to their ability to contribute positively to the transformation of an organization.

Many school districts today face the challenge of recruiting, hiring, developing and retaining quality candidates for the role of school principal (Gaussel, 2007). Professional development for principals is essential to develop school leaders who are more equipped to lead the change process. “Emotional intelligence is important for school administrators and it is time to implement training programs for school administrators to develop these skills to deal with emotions associated with school reform” (Moore, 2009a, pp. 24).

The identification of specific emotional and social competencies that most heavily influence the transformational leader behaviors of school principals would contribute to research in field of educational leadership. Given research showing that emotional and social competencies can be taught and learned over the lifespan (Goleman, 1998b, 2001), being able to drill down to the specific skills and competencies that promote transformational leadership have tremendous implications for school reform efforts.

This research is significant because it seeks to understand the dispositional antecedents of transformational leadership. School principals and their superintendents were selected for participation in the study. These professionals were chosen from a database of schools participating in a grant through the Illinois Children’s Mental Health Partnership, The Collaborative for Academic, Social and Emotional, and the Illinois State Board of Education (ISBE).
For this study school principals completed a demographic survey and two self-report measures assessing transformational leadership behaviors and emotional and social competencies. Those instruments are the self and rater versions of the Multifactor Leadership Questionnaire (MLQ 5X Short), and the Emotional and Social Competence Inventory (ESCI 3.0). The principal’s superintendent completed the other-rater version of these two instruments.

There were 76 sets of subjects available for participation of the study. Of the principals contacted, 20 returned the materials for a return rate of 26%. Eleven of the 20 superintendents contacted completed and returned assessment data about the principal for a return rate of 55%. The researcher used descriptive statistics, t-test, correlational, and multiple regression analysis to explore the relationship between participant responses in these constructs.

Conclusions

Research Question 1: What is the relationship between the principal’s self-assessment of transformational leader behaviors and the principal’s emotional and social competencies?

Findings from the principals’ self-report show a relationship between three of the four clusters from the ESCI and each of the five domains of transformational leadership measured by the MLQ. Furthermore, these three clusters and one or more of the competencies that comprise the clusters also predict transformational leader behaviors across four of the five domains of the MLQ. Diagrams 18, 19, and 20 below provide a visual representation of significant findings related to the self-report and other-rater
relationships between the principal’s transformational leadership and emotional and social competency.

Findings for the current sample of principals indicate that Relationship Management as measured by the ESCI correlates with Attributed Idealized Influence, Intellectual Stimulation and Individualized Consideration from the MLQ. With respect to Attributed Idealized Influence, or the follower’s perceptions of the leader as powerful, confident, ethical and consistent in a focus on higher-order ideals, two of the five competencies that comprise relationship management correlate with Attributed Idealized Influence. Those are Influence (i.e., the use of tactics of persuasion) and Inspirational Leadership (i.e., inspiring and guiding the work of individuals and groups).

Influence and Inspirational Leadership from the ESCI, along with Teamwork, which is defined as the pursuit of shared goals through the creation of group synergy, correlate significantly with Intellectual Stimulation and Individualized Consideration from the MLQ. Through the use of Intellectual Stimulation, norms of operation are continually reviewed and questioned so that new and creative methods for accomplishing the mission can be explored (Barbuto, 2005). The transformational leader who uses Individualized Consideration listens, advises, teaches and coaches to further develop followers. People are treated differently and individually based upon their talents, knowledge and experience (Shin & Zhou, 2003).

While relationship management correlates with three of the five transformational leadership domains of the MLQ, social awareness does so with the other two. Social awareness involves the leader being attuned to the thoughts and feelings of those around
them. The socially aware leader also understands and cares about the perspectives of others and the bigger picture with respect to networks of decision-making and politics at the organizational level (Goleman, Boyatzis & McKee, 2002).

Findings from this study show that there is a relationship between Social Awareness and more specifically Organizational Awareness (i.e., the ability to recognize the power relationships and emotional climate of a group) from the ESCI, and Behavioral Idealized Influence and Inspirational Motivation from the MLQ. Behavioral Idealized Influence is characterized as the charismatic actions that elicit alignment between leader-follower values, beliefs and sense of mission (Antonakis, Avolio, & Sossounov, 2003). Leaders provide Inspirational Motivation by demonstrating enthusiasm, encouragement, and consistency in their communication of high standards and an appealing vision of the future (Bass, 1997).

A correlation also exists between the principals’ self-assessment of Self-Management (i.e., the ability to control disruptive emotions and impulses) and Behavioral Idealized Influence. More specifically, a statistically significant relationship exists between Behavioral Idealized Influence and three of the four competencies that comprise Self-Management including Achievement Orientation, Adaptability and Positive Outlook. This finding suggests a relationship between emotional competencies related to the leader’s ability to demonstrate effort toward improve upon performance, to be flexible in the face of change, and to continually pursue goals in the face of setbacks, and transformational leader behaviors emerging from displays of conviction, emphasis on
trust, commitment, purpose and resolution even in the face of difficult challenges (Bass, 1997).

Findings from the current research show some consistencies with previous studies. In a 2008 quantitative study, Hackett and Hortman looked at the relationship between transformational leadership and emotional and social competencies among assistant principals. Data analysis from that study showed a clear relationship between many of the emotional competencies as measured by the ECI-U with each of the five domains of transformational leadership as measured by the MLQ. Consistencies between the two studies are found in the statistical relationships between the following transformational leader domains and SEL competencies: Behavioral Idealized Influence with Achievement Orientation (Self-Management) and Organizational Awareness (Social Awareness); Intellectual Stimulation with Influence (Relationship Management) and Inspirational Leadership (Relationship Management); and Individualized Consideration with Inspirational Leadership.

One noted difference between these studies lies in the lack of relationship in the current study between Self-Awareness as measured by the ESCI, and any of the domains of transformational leadership as measured by the MLQ. Findings from the current study however are consistent in this regard with the 2006 study of elected public officials by Barbuto and Burbach, who found little relationship between the two with exception that leaders perceived themselves as less inspirational as they became more self-aware according to self-report data. Other consistencies between the Barbuto and Burbach study and current research are noteworthy. Much like the current research, self-report measures
from the 2006 study found a relationship between Inspirational Motivation and a measure of Social Awareness (i.e., Empathetic Response), and Individualized Consideration and a measure of Relationship Management (i.e., Interpersonal Skills).

A 2001 study by Palmer and colleagues also is consistent with current research in the relationships found between SEL competencies and transformational leadership. Those include statistical correlations between a measure of Social Awareness (i.e. ability to monitor emotions in others) and Behavioral Idealized Influence and Inspirational Motivation from the MLQ along with and a measure of Relationship Management (i.e. ability to manage emotions in others) and Individualized Consideration.

Findings from multiple regression analysis related to the first research question from the current study suggest that the principals’ self-assessment of emotional and social skills predict transformational leadership behaviors in four of the five domains assessed by the MLQ. For example, not only is there a correlation between Relationship Management from the ESCI and Intellectual Stimulation and Individualized Consideration from the MLQ, but the former also predicts the latter two in the current sample of principals. Similarly, the Social Awareness cluster and its competency Organizational Awareness both have a relationship with and are a predictor of Behavioral Idealized Influence and Inspirational Motivation alike. Finally, the Self-Management cluster and its competency Adaptability correlate with and predict Behavioral Idealized Influence.

The findings of the current study also are consistent with previous research identifying emotional intelligence as a predictor of transformational leadership. A small
sample of 32 managers, including leaders in education, completed measures of transformational leadership and emotional intelligence (Mandell & Pherwani, 2003). Regression analysis revealed that emotional intelligence in this study did predict transformational leadership. Similar findings emerged from a 1999 study by Sosik and Megarian, where the self-awareness, motivation, empathy, and social skills of the leader predicted transformational leadership styles.

The current study builds upon previous research in a number of different ways. First, it is the only available research with school principals measuring the correlational and predictive relationships between emotional and social competence and transformational leader behaviors. Second, the current study presents original research on not only self-report data from principals, but also other-rater data from their superintendents. Findings from the other-rater assessment are discussed in the next section.

**Research Question 2:** What is the relationship between the superintendent’s assessment of the principal’s transformational leader behaviors and the superintendent’s assessment of the principal’s emotional and social competencies?

The superintendent ratings of their principal’s transformational leader behaviors and emotional and social competencies showed some similarities and differences relative to principal self-assessment. Findings from superintendent data suggest that a significant relationship exists between three of the four ESCI clusters and one of the domains of transformational leadership as measured by the MLQ. Like the principal self-assessment data, other-rater data shows a correlation between Relationship Management and its
competency Inspirational Leadership from the ESCI, and Attributed Idealized Influence from the MLQ. In addition, the Coach and Mentor competency from the Relationship Management cluster of the ESCI (i.e., the ability to sense the professional development needs of others and working to increase the skills and competencies of followers) has a statistically significant correlation with Attributed Idealized Influence.

The Social Awareness cluster and its competency Organizational Awareness also show a significant relationship with transformational leadership based upon both other-rater and self-assessment. However, superintendent data suggests a relationship between this cluster and competency with Attributed Idealized Influence instead of Behavioral Idealized Influence and Inspirational Motivation as found through analysis of the principal self-report data. Further, the superintendents’ assessment of the Principals’ Social Awareness competency Empathy, that is being able to know, understand and be genuinely concerned for the perspectives and feelings of others, also correlates with the principals’ Attributed Idealized Influence as assessed by the superintendents.

Another similarity between self-assessment and other-rater assessment data is the correlation between the self-management cluster of the ESCI, its competency achievement orientation, and transformational leadership. For the superintendents however, this cluster and its competency are once again related to Attributed Idealized Influence rather than Behavioral Idealized Influence.

Consistencies with the current research are found in a recent study measuring the relationship between transformational leadership and emotional intelligence of project managers based upon self-report and other-rater assessment from three distinct groups of
employees (Lindebaum & Cartwright, 2010). Using different instruments to measure
these constructs as compared to the current study, researchers nevertheless found
significant relationships between other-rater assessment of the project managers
transformational leadership and emotional intelligence across a group of supervisors and
two employee groups. Findings from regression analyses reveal not only a correlation
between the variables but also significant F-ratios among same-source ratings for each of
the three other-rater groups, suggesting that emotional intelligence of project managers is
a predictor of transformational leadership.

In addition to the Lindebaum and Cartwright (2010) study, the review of extant
literature reveals some similarities with the current findings from regression analyses
discussed below. Data collected from 51 department managers and 252 employees
showed that manager self-reports of emotional intelligence predicted their
transformational leadership as assessed by the employees (Wang & Huang, 2009).

Other-rater regression data from the current sample of suggests that the other-rater
assessment of the principals’ Self-Management skills predicts other-rater assessment of
Inspirational Motivation as measured by the MLQ. These results are inconsistent with
other findings from the current study. More specifically, while the superintendent data
suggests that the Self-Management cluster from the ESCI predicts Inspirational
Motivation from the MLQ, there is no statistical relationship between the two variables as
measured through correlational analysis. This could be a result of the small sample size
or related to the differences between correlational and regression analysis generally. In
the latter case, where the simple examination of the relationship between two variables
does not reveal a correlation, other factors controlled in/added to the regression model may change how the two variables relate and reveal one variable as a predictor of the other.

**Research Question 3:** *What is the relationship between the principal’s self-assessment of transformational leader behaviors relative to the superintendent’s assessment of the principal’s transformational leader behaviors?*

Results of the data analysis reveal that there is no statistical difference between the self-assessment and other-rater assessment of the principal’s use of Attributed Idealized Influence and Behavioral Idealized Influence. In other words, there is no difference between the two sets of subjects regarding their perceptions of the principals as powerful, confident, ethical and consistent in a focus on higher-order ideals and able to elicit alignment between leader-follower values, beliefs and sense of mission. Further analysis suggests that principal self-assessment of the use of Inspirational Motivation, Intellectual Stimulation, and Individualized Consideration is significantly greater than the superintendent’s assessment of the principal’s use of these transformational leader behaviors. These findings are inconsistent with the earlier study of elected officials where a relationship between self-report and other-rater transformational leadership data was found within Intellectual Stimulation and Inspirational Motivation and not Idealized Influence (Barbuto & Burbach, 2006).
Research Question 4: What is the relationship between the principal’s self-assessment of social and emotional competency relative to the superintendent’s assessment of the principal’s social and emotional competency?

Results of the data analysis reveal no statistical difference between the self-assessment and other-rater assessment of the principal’s use of each of the four clusters from the ESCI. Superintendents’ assessment of the principals’ use of Self-Awareness, Self-Management, Social Awareness, and Relationship Management is no different statistically than principal self-assessment of their use of these emotional and social skills. These findings are inconsistent with other recent research (Lindebaum & Cartwright, 2010). In this study of construction project managers, a statistically significant difference was found between the self-report and supervisor assessment of the project manager’s emotional intelligence.

These inconsistencies in current research and extant literature mentioned here and throughout the chapter five could be the result of a number of factors. Those potential factors include the small sample size of the current study, the dyadic differences across leader-member and leader-supervisor relationships, the varied types of leadership positions studied in the extant literature and the current study, and the vast perceptual differences that might exist among leaders and raters generally.

Findings related to the third and fourth research question support and strengthen results from the correlational and regression analyses described above. No statistical difference exists between the self-report and other-rater assessment of Attributed and Behavioral Idealized Influence respectively. The same is true in that there is no statistical
difference between principal and superintendent ratings of the principals' use of each of
the four clusters of emotional and social competence including Self-Awareness, Self-
Management, Social Awareness, and Relationship Management. The most compelling
findings are therefore found in cases where there is consistency in results across multiple
research questions.

Relationship Management and the competency Inspirational Leadership correlate
with Attributed Idealized Influence for both self-report and other rater assessments. In
addition, as stated above, there is no statistical difference between principals and
superintendents in their assessment of the principals’ ability to manage relationships or to
consistently focus on higher-order ideals in a powerful, confident, and ethical manner.
Principal self-report of Relationship Management also correlates with and predicts the
principals’ transformational leadership in the areas of Intellectual Stimulations and
Individualized Consideration. Also, two of the competencies that comprise Relationship
Management, Influence and Inspirational Leadership, correlate significantly with
multiple domains of transformation leadership as assessed by both the principals and
superintendents.

The Social Awareness of the principals studied also appears to be significant in its
relationship to transformational leadership in that this set of skills, and one of its
underlying competencies, Organizational Awareness, correlate with and predict principal
self-assessment of Behavioral Idealized Influence and Inspirational Motivation. There
also is a relationship between the principals’ Social Awareness, Organizational
Awareness, and transformational leadership behaviors as measured by superintendents.
Finally, Self-Management correlates with and predicts transformational leadership based upon both self-report and other-rater assessment. More specifically, Adaptability correlates with and predicts Behavioral Idealized Influence while Achievement Orientation is related to principal transformational leadership based upon self-report and other-rater assessment.

These findings have potential implications for school leadership including leadership training programs, professional development, and hiring practices. These implications are discussed in the following section.

Implications for Educational Practice

Sustainable school reform efforts are needed to move schools closer toward the ideals of equity, justice and success for every student. Among the myriad leadership theories posed and studied since the early part of the 20th century, transformational leadership relates directly in many respects to the need for school reform (Moore & Rudd, 2006).

A review of the extant literature indicates that transformational school leadership has positive effects on school culture (e.g., Barnett & McCormick, 2004), teacher commitment, teacher job satisfaction (e.g., Bolger, 2001), changed teacher practices (e.g., Leithwood et al., 2004), planning and strategies for change (e.g., Leithwood, Aitken, & Jantzi, 2001), pedagogical or instructional quality, (e.g., Marks & Printy, 2003), organizational learning (e.g., Silins, Mulford, & Zarins, 2002), collective teacher efficacy (e.g., Ross, 2004), and student engagement (e.g., Leithwood et al., 2003). While limited research in educational leadership supports the link between the emotional and social
competence and transformational behaviors of the school leader, no studies heretofore have identified the dispositional antecedents to transformational leadership among principals.

This study identifies relationship management, social awareness, and self-management as emotional and social skills that correlate with and predict transformational leadership behaviors among the group of principals studied. In conclusion, findings suggest that the principal’s ability to manage relationships, understand the thoughts, feelings, and perspectives of others, recognize the bigger picture, control disruptive impulses and be flexible in the face of change predicts behaviors that can lead to meaningful reforms efforts and positive school outcomes.

The self-report findings from principals are supported by similar results from other-rater assessment by their superintendents. More specifically, data analysis reveals the particular importance of the following emotional and social competencies as antecedents to transformational leadership:

1. Organizational Awareness;
2. Influence;
3. Inspirational Leadership.

Some research suggests that the lack of quality applicants for the role of principal is related to inadequate training that is too disconnected from actual practice and empirical knowledge (Levine, 2005). Not only can social and emotional competencies be taught and learned, our capacity for learning increases across the lifespan. Leadership training programs and professional development activities for school leaders should
include curriculum that explicitly teaches school leaders to recognize power relationships and emotional climate of a group (Organizational Awareness), to effectively utilize tactics of persuasion (Influence), and to inspire and guide the work of individuals and teams (Inspirational Leadership). This could be accomplished, for example, through the analysis of, and problem solving related to case study examples, or through role-play of all staff meetings, team meetings, and one-to-one or small group “critical conversations” with formative feedback offered throughout. “Training can enhance the personal competencies so vital for effective leadership in today’s schools, but only if it is appropriately designed and implemented” (Cherniss, 1998, p. 28).

Furthermore, valid, reliable, and easy to administer assessment tools should be created, and/or utilized where available, to provide formative feedback to schools leaders and to aid school districts in hiring practices. “If emotional intelligence scores can predict transformational leadership, organizations may find emotional intelligence measures to be valuable tools in the hiring, promotion and development of organizational leaders” (Mandell & Pherwani, 2003, p. 400).

Finally, these findings offer implications for principals that extend beyond training and professional development. As research suggests, better outcomes for students, teachers, staff, and the school climate in general are more likely in schools lead by principals who are emotionally and socially competent and perceived by others as transformational. Not only should principals willingly seek feedback from their faculty and staff regarding his or her transformational behaviors and emotional and social competency, these data should be used as one component of the superintendent’s process
of evaluating the principal. These data, however, should be carefully considered as part of the evaluation process for principals as there will no doubt be negative perceptions of even the most skillful leaders any time faculty are challenged to think differently about their work, to move outside their comfort zone, and to change teacher practices related to curriculum, instruction and assessment.

While these findings are significant for the current research sample, there are limits to the generalizability of the results. Those limitations are outlined in the following section.

Limitations

When assessing the results of this study, there are several limitations worthy of consideration. The small size and potential homogeneity of the sample is a limitation of this study. With only 20 principals and 11 superintendents responding, concerns exist relative to sample variation and the presence of type II error. Data analysis related to the first two research questions in particular raises potential issues related to type II error where high F values in some cases indicate that emotional and social competencies should predict transformational leadership behavior but no such effect is found. Also, given that the sample is drawn from the database of schools participating in a social-emotional learning grant in Illinois, it is possible that the participants do not represent a normative sample of school leaders in the field.

Superintendents responding to the study averaged just over three years of work experience with their principal. Given this fact and the potential likelihood that the superintendent does not work on a daily basis with the principal, the researcher is limited
in his ability to draw conclusions from superintendent data that extend beyond the current sample.

Another limitation of this study is that 56 principals from the sample population chose not to participate in this study. With 26% of the sample population of principals participating in this study, the potential for non-response bias must be considered. Also, because the superintendent was the only rater of the principal, it is feasible that potential concerns about anonymity may negatively influence item responses.

The possibility for common method variance is another potential limitation of this study. According to Doty and Glick (1998), CMV exists when systematic variance is introduced into the measure by the measurement technique itself. The transformational behaviors and emotional and social competencies of principals measured for the purpose of this study may be particularly prone to effects of common method variance as both are thoroughly influenced by emotion (George, 2000). The possibility for common method bias is increased when same-source ratings are analyzed, as done to answer the first two research questions of this study (Barbuto & Bubach, 2006).

This study is does not consider the perspectives or opinions of teachers, staff, or students regarding the transformational leader behaviors or emotional and social competencies of the principal. Further, the study does not attempt to link the attributes and behaviors of the principal to student achievement, organizational performance, or other outcomes in schools. Each of these aforementioned limitations should be considered as part of future research on principals and the relationship between emotional and social competence and transformational school leadership.
Recommendations for Future Research

The findings of this study showed a relationship between transformational leader behaviors and emotional and social competencies of the principal as measured by self-report and other-rater assessment. Future research should include a larger sample of principals from a variety of settings. In this research, a 360-degree assessment of the principals’ transformational leader behaviors and emotional and social competencies should be ascertained from supervisors, colleagues, teachers, staff and students. This will allow for a variety of perspectives and a more inclusive picture the relationships between the variables measured. In addition to the 360-degree assessment of attitudinal variables, future research should examine these data in light of the organizational culture to determine how culture influences the effects of emotional and social competence on transformational leader behavior (Kupers & Weiber, 2005). Also, future research should examine the interaction between the emotional and social competence and transformational leader behaviors of principals with measures of teacher efficacy and student achievement.

The small sample size of the current study impacts the generalizability and statistical validity of the conclusions. A case in support of the current findings could be echoed from the work of Barling and colleagues (2000) in that “while the sample size was relatively small, however, we argue that this has no negative effects in terms of showing a link between emotional intelligence and transformational leadership (i.e. statistical conclusion validity), because if anything, small samples would bias the findings in a conservative manner” (p. 160)
Additionally, some consideration for a different approach to measuring emotional and social competence may be warranted. This study adopted the conceptualization of emotional and social competence as traits or innate personal qualities resulting in preferred modes of behavior in response to people and situations (Bar-On, 1997; Lindebaum & Cartwright, 2010). Employing an ability-based measure of emotional intelligence (e.g., the Mayer-Salovey-Caruso Emotional Intelligence Test, MSCEIT), would allow for the assessment of principal’s answers to right/wrong questions for the purpose measuring mental ability to process emotional information (Lindebaum & Cartwright, 2010; Mayer, Salovey, & Caruso, 2008). “Of the various EI measurement schemes which have been proposed or reported as being underway, it seems likely that ability-based scales that measure how well people perform tasks and solve emotional problems will be more likely to stand the test of academic scrutiny than scales which rely exclusively on self-assessment of emotional skills” (Brown & Moshavi, 2005, p. 870). “An objective measure of emotional intelligence, such as the ability-based emotional intelligence test (Mayer, Salovey, & Caruso, 2002), may perhaps offer a more objective assessment of emotional intelligence than the standard self-report format used in the present study” (Barbuto & Burbach, 2006, p. 61).

Summary

This chapter provided an overview of research methods, a summary of the research findings, and links between this study and related literature. Findings from the current study are consistent with previous research showing a relationship between emotional and social competence and transformational leadership of school principals.
Current research adds to the extant literature by revealing emotional and social skills and competencies as predictors of transformational leadership based upon principal self-report and superintendent other-rater assessment. Also considered in this chapter were the limitations of the current study along with recommendations for future research.
Figure 18. Self-Report and Other-Rater Assessment of the Relationship Between the Principal’s use of Relationship Management and Transformational Leader Behaviors
Figure 19. Self-Report and Other-Rater Assessment of the Relationship Between the Principal’s use of Social Awareness and Transformational Leader Behaviors
Figure 20. Self-Report and Other-Rater Assessment of the Relationship Between the Principal’s use of Self-Management and Transformational Leader Behaviors
APPENDIX A

INFORMATIONAL EMAIL TO POTENTIAL RESEARCH PARTICIPANTS - PRINCIPALS
Dear Principal’s Name,

My name is David Saxe. I am currently completing the Ed.D. in Administration and Supervision at Loyola University Chicago. My dissertation is entitled, The Relationship Between Transformational Leadership and the Emotional and Social Competence of School Principals.

You are being asked to participate in this research because of your school’s grant with the Illinois Children’s Mental Health Partnership, CASEL and ISBE. This research is not affiliated with or required by this grant. Your participation will require approximately 30 minutes of your time. You will be asked to complete a short demographic survey and two questionnaires regarding your transformational leadership behaviors and emotional and social competencies. Should you agree to participate, your superintendent will be asked to complete the rater version of these same two instruments.

Please understand that I will keep all information confidential. I will maintain sole access to the data, which will be coded so that participants and schools are not named. Questionnaire data will be used only for drawing correlations and performing multiple regression data analysis.

Your participation in this research is completely voluntary. There is no penalty for choosing not to participate. In addition, you are free to withdraw at any time, for any reason, with no penalty whatsoever.

I truly value your time, and am sensitive to the many demands of your work. In return for your participation, I will provide you with a summary of my research findings if desired.

Within a week or so you will receive a copy of the research materials. If you have questions, contact me at dsaxe@luc.edu or (847) 415-4000. Questions regarding this research study as part of my Ed.D program at Loyola University also can be directed to Dr. Janis Fine, Graduate Program Director, Administration and Supervision at jfine@luc.edu.

Thank you for your consideration of this request. I look forward to learning from you.

Sincerely,
David Saxe
Loyola University Chicago
APPENDIX B

INFORMATIONAL EMAIL TO POTENTIAL RESEARCH PARTICIPANTS-SUPERINTENDENTS
Spring, 2010

Superintendent’s Name
Name of School District
Address
City, Illinois, Zip

Dear Superintendent’s Name,

My name is David Saxe. I am currently completing the Ed.D. in Administration and Supervision at Loyola University Chicago. My dissertation is entitled, The Relationship Between Transformational Leadership and the Emotional and Social Competence of School Principals.

Principal’s Name at School Name has agreed to participate in this study in connection with the school’s grant through the Illinois Children’s Mental Health Partnership, CASEL and ISBE. This research is not affiliated with or required by the grant. For the purpose of this study, Principal’s Name has completed a short demographic survey and two questionnaires regarding his/her transformational leadership behaviors and emotional and social competencies. Should you agree to participate, you will be asked to complete the rater version of these same two instruments to provide your perceptions of the transformational leader behaviors and emotional and social competencies of Principal’s Name. Your participation in the study will require approximately 30 minutes of your time.

Please understand that I will keep all information confidential. I will maintain sole access to the data, which will be coded so that participants and schools are not named. Questionnaire data will be used only for drawing correlations and performing multiple regression data analysis.

Your participation in this research is completely voluntary. There is no penalty for choosing not to participate. In addition, you are free to withdraw at any time, for any reason, with no penalty whatsoever.

I truly value your time, and am sensitive to the many demands of your work. In return for your participation, I will provide you with a summary of my research findings if desired.

Within a week or so you will receive a copy of the research materials. If you have questions, contact me at dsaxe@luc.edu or (847) 415-4000. Questions regarding this research study as part of my Ed.D program at Loyola University also can be directed to Dr. Janis Fine, Graduate Program Director, Administration and Supervision at jfine@luc.edu.

Thank you for your consideration of this request. I look forward to learning from you.

Sincerely,
David Saxe
Loyola University Chicago
APPENDIX C

CONSENT TO PARTICIPATE IN RESEARCH-PRINCIPALS
To: (Name of Principal)

From: David Saxe

Date: Spring, 2010

Re: Consent to participate in research

Project Title: The Relationship Between Transformational Leadership and the Emotional and Social Competence of the School Leader.

Researcher: David Saxe

Faculty Sponsor: Dr. Janis Fine, Administration and Supervision Program
Loyola University Chicago

You are being asked to take part in a research study conducted by David Saxe for a dissertation project under the supervision of Dr. Janis Fine at Loyola University Chicago. You are being asked to participate because of your school’s affiliation with the Collaborative for Academic, Social, and Emotional Learning (CASEL).

Please read this form carefully and ask any questions of the researcher before agreeing to participate. You may contact the researcher at dsaxe@luc.edu or (847) 415-4000.

Purpose:
The purpose of this research is to examine the predictive relationship between transformational leadership behaviors and the emotional and social competencies of school principals.

Procedure:
You are being asked to participate in this research because of your school’s grant with the Illinois Children’s Mental Health Partnership, CASEL, and ISBE. This research is not affiliated with or required by the grant. Your participation will require approximately 30 minutes of your time. You will be asked to complete a short demographic survey and two questionnaires regarding your transformational leadership behaviors and emotional and social competencies. Should you agree to participate, your superintendent will be asked to complete the rater version of these same two instruments.

Risks/Benefits:
The only potential risk or benefit is that your superintendent may begin to think about your work through the lens of transformational leadership and emotional and social competence. There are no direct benefits to you from participation. However, given research showing that emotional and social competencies can be taught and learned over the lifespan, being able to drill down to the specific skills and competencies that promote
transformational leadership has tremendous implications for school reform efforts, principal training, professional development and hiring practices.

Confidentiality:
Only the researcher will have access to the raw data. The identity of all respondents will be kept strictly confidential. No identifying information for participants or their schools will be presented in the results of the study. Data from the schools will be aggregated, with no discernible connections included between the data from the principal and the data from his or her superintendent. The consent forms and questionnaires will be stored in two different locked file cabinets in the researcher’s office. These forms will be destroyed one year following the final defense and approval of the dissertation.

Voluntary Participation:
Please understand that your participation in this research is completely voluntary. There is no penalty for deciding not to participate. In addition, you are free to withdraw from participation at any time, for any reason, with no penalties whatsoever.

Contacts and Questions:
If you have any questions about this research study, please feel free to contact David Saxe at dsaxe@luc.edu or (847) 415-4000. You may also contact Dr. Janis Fine at jfine@luc.edu. If you have questions regarding your rights as a research participant, you may contact the Compliance Manager in Loyola’s Office of Research Services at (773) 508-2689.

Statement of Consent:
Your signature below indicates that you have read and understood the information provided above, have had an opportunity to ask questions, and agree to participate in this research study.

_____________________________________________ ______________
Participant’s Signature     Date

Please return this consent form with the demographic survey and 2 questionnaires in the enclosed, pre-addressed envelope.
APPENDIX D

CONSENT TO PARTICIPATE IN RESEARCH-SUPERINTENDENTS
To: (Name of Superintendent)  
From: David Saxe  
Date: Spring, 2010  
Re: Consent to participate in research  

Project Title: The Relationship Between Transformational Leadership and the Emotional and Social Competence of the School Leader.  

Researcher: David Saxe  
Faculty Sponsor: Dr. Janis Fine, Administration and Supervision Program Loyola University Chicago  

You are being asked to take part in a research study conducted by David Saxe for a dissertation project under the supervision of Dr. Janis Fine at Loyola University Chicago. You are being asked to participate because of your school’s affiliation with the Collaborative for Academic, Social, and Emotional Learning (CASEL).  

Please read this form carefully and ask any questions of the researcher before agreeing to participate. You may contact the researcher at dsaxe@luc.edu or (847) 415-4000.  

Purpose:  
The purpose of this research is to examine the predictive relationship between transformational leadership behaviors and the emotional and social competencies of school principals.  

Procedure:  
Principal Name at School Name has agreed to participate in this study in connection with the school’s social emotional learning grant through CASEL. This research is not affiliated with or required by CASEL. For the purpose of this study, Principal Name will complete a short demographic survey and two questionnaires regarding his/her transformational leadership behaviors and emotional and social competencies. Should you agree to participate, you will be asked to complete the rater version of these same two instruments to provide your perceptions of the transformational leader behaviors and emotional and social competencies of Principal Name. Your participation in the study will require approximately 30 minutes of your time.  

Risks/Benefits:  
There are no foreseeable risks involved in participating in this research. There are no direct benefits to you from participation. However, given research showing that emotional and social competencies can be taught and learned over the lifespan, being able
to drill down to the specific skills and competencies that promote transformational leadership has tremendous implications for school reform efforts, principal training, professional development and hiring practices.

Confidentiality:
Only the researcher will have access to the raw data. The identity of all respondents will be kept strictly confidential. No identifying information for participants or their schools will be presented in the results of the study. Data from the schools will be aggregated, with no discernible connections included between the data from the principal and the data from his or her superintendent. The consent forms and questionnaires will be stored in two different locked file cabinets in the researcher’s office. These forms will be destroyed one year following the final defense and approval of the dissertation.

Voluntary Participation:
Please understand that your participation in this research is completely voluntary. There is no penalty for deciding not to participate. In addition, you are free to withdraw from participation at any time, for any reason, with no penalties whatsoever.

Contacts and Questions:
If you have any questions about this research study, please feel free to contact David Saxe at dsaxe@luc.edu or (847) 415-4000. You may also contact Dr. Janis Fine at jfine@luc.edu. If you have questions regarding your rights as a research participant, you may contact the Compliance Manager in Loyola’s Office of Research Services at (773) 508-2689.

Statement of Consent:
Your signature below indicates that you have read and understood the information provided above, have had an opportunity to ask questions, and agree to participate in this research study.

___________________________________________ ______________
Participant’s Signature     Date

Please return this consent form with 2 questionnaires in the enclosed, pre-addressed envelope.
APPENDIX E

LETTER OF INSTRUCTIONS-PRINCIPALS
To: (Name of Principal)  

From: David Saxe  

Date: Spring, 2010  

Re: Letter of Instructions  

Please consider participating in this research study. To do so complete the following steps:  

1. Sign and date the letter of consent.  
2. Complete the demographic survey.  
3. Answer only the highlighted items from the MLQ.  
4. Answer all items from the ESCI  
5. Return the above materials in the self-addressed, stamped envelope.  

I look forward to receiving your results. Please let me know if you desire feedback about the overall findings of the research study.  

Sincerely,  

David Saxe  
dsaxe@luc.edu  
(847) 415-4000
To:  (Name of Superintendent)

From:  David Saxe

Date:  Spring, 2010

Re:  Letter of Instructions

Please consider participating in this research study. To do so complete the following steps:

1. Sign and date the letter of consent.
2. Answer only the highlighted items from the MLQ.
3. Answer all items from the ESCI.
4. Return the above materials in the self-addressed, stamped envelope.

I look forward to receiving your results. Please let me know if you desire feedback about the overall findings of the research study.

Sincerely,

David Saxe
dsaxe@luc.edu
(847) 415-4000
APPENDIX G

DEMOGRAPHIC SURVEY
**Instructions:** Please respond to the following questions regarding you, your school, and your school district.

1. What is your age? ________

2. What is your gender? (check one):
   - ____ Male
   - ____ Female

3. Years of administrative experience: ________

4. Years in your current position: ________

5. Highest degree attained (check one):
   - ____ Masters Degree
   - ____ Doctoral Degree in Administration and Supervision
   - ____ Doctoral Degree in another field

6. Grade range of students in your school: ________

7. Number of students enrolled at your school: ________

8. Number of schools in your district: ________

9. Number of years you have worked with superintendent: ________
APPENDIX H

MULTIFACTOR LEADERSHIP QUESTIONNAIRE LEADER FORM (5X-SHORT)
Use the following rating scale:

<table>
<thead>
<tr>
<th>Not at all</th>
<th>Once in a while</th>
<th>Sometimes</th>
<th>Fairly often</th>
<th>Frequently, if not always</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

1. I provide others with assistance in exchange for their efforts……0 1 2 3 4
2. I re-examine critical assumptions to question whether they……0 1 2 3 4 are appropriate.
3. I fail to interfere until problems become serious……………… 0 1 2 3 4
4. I focus attention on irregularities, mistakes, exceptions……….. 0 1 2 3 4 and deviations from standards.
5. I avoid getting involved when important issues arise……………0 1 2 3 4
APPENDIX I

EMOTIONAL AND SOCIAL COMPETENCE INVENTORY

SELF VERSION 3 (ESCI 3.0)
<table>
<thead>
<tr>
<th>Item Number</th>
<th>Please carefully respond to each survey item below. You:</th>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
<th>Consistently</th>
<th>Don't Know</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Anticipate how others will respond when trying to convince them</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>2</td>
<td>Works well in teams by encouraging cooperation</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>3</td>
<td>Convince others by developing behind the scenes support</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>4</td>
<td>Initiate actions to improve own performance</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>5</td>
<td>Do not cooperate with others</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>
APPENDIX J

MULTIFACTOR LEADERSHIP QUESTIONNAIRE RATER FORM (5X-SHORT)
Use the following rating scale:

<table>
<thead>
<tr>
<th>Not at all</th>
<th>Once in a while</th>
<th>Sometimes</th>
<th>Fairly often</th>
<th>Frequently, if not always</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

*The Person I AM Rating...*

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

EMOTIONAL AND SOCIAL COMPETENCE INVENTORY VERSION 3 (ESCI 3.0)
<table>
<thead>
<tr>
<th>Item Number</th>
<th>Please carefully respond to each survey item below. The person you are rating:</th>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
<th>Consistently</th>
<th>Don't know</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Anticipates how others will respond when trying to convince them</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Works well in teams by encouraging cooperation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Convinces others by developing behind the scenes support</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Initiates actions to improve own performance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Does not cooperate with others</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX L

MIND GARDEN LETTER GRANTING PERMISSION TO USE COPYRIGHT MATERIAL
mind garden

www.mindgarden.com

To whom it may concern,

This letter is to grant permission for the above named person to use the following copyright material:

Instrument: Mutifactor Leadership Questionnaire

Authors: Bruce Avolio and Bernard Bass

Copyright: 1995 by Bruce Avolio and Bernard Bass

for his/her thesis research.

Five sample items from this instrument may be reproduced for inclusion in a proposal, thesis, or dissertation.

The entire instrument may not be included or reproduced at any time in any other published material.

Sincerely,

Robert Most
Mind Garden, Inc.
www.mindgarden.com

MLQ. © 1995 Bruce Avolio and Bernard Bass. All Rights Reserved.
Published by Mind Garden, Inc., www.mindgarden.com
APPENDIX M

FOLLOW-UP EMAIL TO RESEARCH PARTICIPANTS-PRINCIPALS
Spring, 2010

Principal’ Name
Name of School
Address
City, Illinois, Zip

Dear Principal’s Name,

Approximately two weeks ago, you should have received a packet of materials related to a dissertation research study I am conducting for the Ed.D. in Administration and Supervision at Loyola University Chicago. My dissertation is entitled, The Relationship Between Transformational Leadership and the Emotional and Social Competence of School Principals.

At this point you may have already returned the materials to me. If so, thank you so much for taking the time to assist me. If you have not yet had a chance to complete and return the materials, I would truly appreciate it if you would do so.

Please understand that I will keep all information confidential. I will maintain sole access to the data, which will be coded so that participants and schools are not named.

If you have any questions, you can contact me at (847) 415-4000. Questions regarding this research study as part of my Ed.D. program at Loyola University also can be directed to Dr. Janis Fine, Graduate Program Director, Administration and Supervision at jfine@luc.edu.

Thank you for your help with my research.

Sincerely,
David Saxe
Loyola University Chicago
dsaxe@luc.edu
APPENDIX N

FOLLOW-UP EMAIL TO RESEARCH PARTICIPANTS-SUPERINTENDENTS
Dear Superintendent’s Name,

Approximately two weeks ago, you should have received a packet of materials related to a dissertation research study I am conducting for the Ed.D. in Administration and Supervision at Loyola University Chicago. My dissertation is entitled, The Relationship Between Transformational Leadership and the Emotional and Social Competence of School Principals.

At this point you may have already returned the materials to me. If so, thank you so much for taking the time to assist me. If you have not yet had a chance to complete and return the materials, I would truly appreciate it if you would do so.

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If you have any questions, you can contact me at (847) 415-4000. Questions regarding this research study as part of my Ed.D. program at Loyola University also can be directed to Dr. Janis Fine, Graduate Program Director, Administration and Supervision at jfine@luc.edu.

Thank you for your help with my research.

Sincerely,
David Saxe
Loyola University Chicago
dsaxe@luc.edu
REFERENCE LIST


VITA

David Saxe is the son of Cindy and Tom Vallero, and Larry and Sharon Saxe. Born in Spring Valley, Illinois on October 10, 1971, David currently resides in Palatine with his wife Kim, and four children Andrew, Ryan, Leah, and Brennan.

David attended public school through grade 12, and graduated from Illinois Wesleyan University in 1993 with a degree in psychology. During graduate school that followed, David worked for two years at a residential treatment facility for children with special needs. In 1998, David earned a specialist degree in school psychology from Illinois State University. In 2003, he earned a type 75 administrative certificate, again from ISU.

For the past 13 years, David has worked in public education. From 1998-2007, he was employed at William Fremd High School as a school psychologist, student services coordinator, dean of students and coach. In the fall of 2007, David became the director of student services at Adlai E. Stevenson High School. In this role, he partnered for two years with educators, researchers, and representatives from the Collaborative for Academic, Social and Emotional Learning, the Illinois State Board of Education, the Illinois Children’s Mental Health Partnership, and the Marzano Research Laboratory. This important work has involved the creation of K-12 assessment rubrics for social and emotional learning in the classroom and other educational environments. Currently, David is employed as the Assistant Principal for Operations and Program Support at
Adlai E. Stevenson High School. Each of these experiences contributes to his passion for this dissertation topic.
Dissertation Committee

The Dissertation submitted by David Saxe has been read and approved by the following committee:

Janis Fine, Ph.D., Director
Associate Professor, School of Education
Loyola University Chicago

Marla Israel, Ed.D.
Associate Professor, School of Education
Loyola University Chicago

Meng-Ju Wu
Assistant Professor, School of Education
Loyola University Chicago