AN EXAMINATION OF THE RELATIONSHIP OF EMOTIONAL INTELLIGENCE LEVELS TO BALANCED LEADERSHIP RESPONSIBILITIES AND LEADERSHIP EFFECTIVENESS IN HIGH SCHOOL PRINCIPALS

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ABSTRACT

Recent changes in federal legislation accompanied by the threat of lost funding created a sense of urgency within educational systems to orchestrate changes that would increase the achievement of all students. Public concerns including low achievement levels, high drop-out rates, and inadequate preparation for college underscore an ever growing sense of urgency at the high school level. As high schools are required to raise levels of expectations and student achievement, the job of high school principal has transformed beyond managerial skill and instructional expertise to include relationship management requiring a set of emotions-based soft skills. Recent brain-functioning research has established the link between cognitive and emotional intelligence (Goleman, 1998; Goleman, Boyatzis, & McKee, 2002) while research in the field of leadership (Blake & Mouton, 1985; Bolman & Deal, 1997; Bruffee, 1997; Davis, 2003; Doyle & Smith, 2006; Fullan, 2001; George, 2004; Hersey & Blanchard, 1997; Kouzes & Posner, 1987; Spillane & Camburn, 2006;) has placed emphasis on emotional competencies related to self and social emotional awareness and the regulation of emotions both personally and socially for the purpose of increasing leadership effectiveness. The fundamental problem being addressed through and guiding this study was: what emotional competencies reinforce leadership behaviors and practices that augment school improvement efforts resulting in increased student

achievement? A mixed-design approach was selected for this study. Both qualitative data collected with a researcher-created survey as well as quantitative data resulting from personal interviews and focused group sessions were collected and analyzed. Results indicated a significant correlation between emotional intelligence competency and balanced leadership behavior. In addition there was a significant difference in the area of social awareness between female and male principals, with female principals scoring higher in this area of emotional intelligence competency. Although no other significant differences were found between gender or achievement groupings, individual item analysis revealed weaknesses and strengths in with regard to both emotional intelligence competency and balanced leadership behavior that may be used as starting points for professional development programs focused on enhancing both the emotional intelligence competency and balanced leadership behavior of principal leadership.

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CHAPTER ONE INTRODUCTION OF THE STUDY

Background

Unequivocal urgency shapes our national discussion of public education....The demand for effective leadership is clear. We need school leaders who visualize successful student learning, understand the work necessary to achieve it, and have the skills to engage with others to make it happen. (U.S. Department of Education, 2004, p.1)

The "urgency" cited above resulted, in part, from the passage of *Public Law 107-110* in 2001. Designed to close the achievement gap among various demographic groups of students, the *No Child Left Behind Act* (NCLB), as the legislation became known, changed the culture of American public schools through increased accountability for the achievement of *all* students. Unlike previous educational reform initiatives, NCLB used federal funding dollars as leverage for the implementation of school improvement plans and programs. Failure to comply with federal mandates could result in termination of federal funding at the state as well as the district level. Educational stakeholders at all levels began to exhibit increased levels of concern for student achievement levels that fell short of NCLB benchmarks (U. S. Department of Education, Department of Education, 2002).

This achievement gap was especially evident at the high-school level. In April, of 2005, Pete D. Hart Associates and the Winston group conducted a national survey focused on high school reform. Results indicated that 51% of the adults surveyed felt that high schools needed "major changes or a complete overall" (Hart & Winston, 2005, p.2). Hart and Winston's (2005) findings also included:

• 51% felt that high schools failed to adequately prepare students for college

- 63% felt that high schools failed to provide the training necessary for successful entrance
 into the work force
- 51% felt high schools failed to teach the basics
- 64% felt high schools did not maintain the high expectations for students
- 69% felt high schools failed to provide adequate support for struggling students and did little to prevent drop-outs (p. 2).

Nationally, only 70% of students in public high schools graduate. Furthermore, only 32% of students leaving high school possess knowledge and skill qualifications for applying to four-year colleges (Greene & Forster, 2003). Missouri, with an overall graduation rate of 74%, ranks 21st in the nation. Missouri's drop-out rate of 3.7 falls slightly below the national rate of 3.9 (U.S. Department of Education, 2007).

Missouri achievement levels in mathematics and communication arts are equally disconcerting. Results of the 2006 state assessment indicated that 57.3% of Missouri 11th grade students fell below the proficient level in communication arts while 57.6% of Missouri 10th grade students scored below the proficient level in mathematics. The 2007 achievement results showed no improvement. Eleventh grade communication arts mastery decreased as 58.2% fell below the state established proficiency level. Tenth grade mathematics followed suite with 58.9% failing to reach the proficiency mark (Missouri Department of Elementary and Secondary Education, 2007). Even when considering the top ten highest performing high schools in the state, the achievement picture does not get much better. In 2006, the top ten Missouri high schools averaged 32% of students scoring below proficiency in communication arts and 35% below proficiency in mathematics (Missouri Department of Elementary and Secondary Education, 2007)

Public concerns including low achievement levels, high drop-out rates, and inadequate levels of preparedness for college have contributed to the "unequivocal urgency" (U.S. Department of Education. 2004, p.1) cited above. Academic concern, however, is not the only impetus driving school reform. Prior to the enactment of NCLB, only 11 states were in compliance with federal educational accountability standards. As a result of the monetary sanctions outlined by NCLB, all 50 states had approved accountability plans by June 10, 2003 (U.S. Department of Education. 2004).

In this accountability-oriented environment, it is the high school principal that is invariably linked with the performance of his or her students (Young, 2007).

Strong leadership from the principal can be a powerful force toward school reform...The principal's role is important. Reform requires a titular and conceptual leader. In fact, a great deal of research indicates that no other than the school administrator can easily assume the role of visible head of a reform effort (Marzano, 2003, pp. 174-175).

Given the pressure for increased student achievement within a context of mounting accountability standards and public concern, what skills must high school principals' possess to be effective? How do those principals that are succeeding differ in emotional intelligence from those that have not been able to foster increased student achievement? This study was designed to explore emotional intelligence competencies as they relate to balanced leadership responsibilities among high school principals in both low performing and high performing environments. Areas of strengths and weakness with regard to emotional intelligence competencies were compared to those competencies associated with effective school leadership as defined within the *Balanced Leadership* framework (Marzano, Waters, & McNulty, 2005). Additionally, areas of strengths and weaknesses were also compared to levels of student

performance as determined be the Missouri Assessment Program Summative testing in communication arts.

Although there were numerous studies (Block & Kreman, 1996; Caruso, 2005; Gardner, 1983; Goleman, 1995; Rafaeli & Worline, 2001; Salovey & Mayer, 1990; Webb, 2004) about the emotional strengths and weaknesses of effective leaders as well as an even more abundant repertoire of studies (Blake & Mouton, 1985; Davis, 2003; Doyle & Smith, 2006; Fleishman, 1953; Greanleaf, 2002; Hersey & Blanchard, 1977; Katz & Kahn, 1952; Kouzes & Posner, 2003; Leithwood & Duke, 1999; Leithwood, Jantzi, & Steinbach, 2000; Loeb & Kindel, 1999; Marzano, Waters, & McNulty, 2003; Rosete & Ciarrochi, 2005; Sadler, 1997; Spillane, 2006; Spillane, Camburn & Pareja, 2007) focused on effective leadership behaviors, no interconnected body of research was found to address the relationship between emotional competency strengths and effective leadership responsibilities. The study of such relationships underscores the practice of what Dickman, Stanford-Blair, and Rosati-Bojar (2004) referred to as "mindful leadership" (p. 197). "Leadership that is connected in both perception and practice" (p. 197). Studies such as this one will serve to "inform how leaders perform to transform" (Dickman, Stanford-Blair, & Rosati-Bojar, 2004, p. 197).

In Chapter Two, current literature was examined to more fully inform the purpose of this study, which was to investigate the relationship between emotional intelligence competencies and leadership responsibilities among high school principals from both low and high performing schools. Four separate yet interrelated constructs emerged to include leadership, measures of effective leadership, emotional intelligence theory, and the measurement of emotional competence. The constructs were viewed through the perspective of the *Balanced Leadership* framework (Waters, Marzano, & McNulty, 2003) in order to connect leadership behaviors

exhibited by effective high school principals and emotion-based constructs of emotional intelligence.

Theoretical or Conceptual Underpinnings of the Study

Four constructs were reviewed to examine leadership effectiveness, as defined by student achievement, through the lens of behaviors and practices: leadership theory, leadership effectiveness, emotional intelligence theory, and the measurement of emotional competence.

Today, education leaders have taken on the task of leading groups, schools, and organizations across a rapidly shifting terrain of societal change (Cunningham & Cordeiro, 2000). Successful implementation of school improvement initiatives requires a shift from traditional educational administrative leadership to leadership based in shared ownership and motivated by individual empowerment. Such a foundation requires trust and respect. (Fullan, 2001; Sparks, 2005; Whitaker, 2003; Valentine, 2001) "Organizational structures," stated Valentine (2001) "should be established that foster interaction and interpersonal relationshipbuilding" (p.2). Valentine (2001) continued "The ability to empower and establish ownership among the faculty is associated with the skills of the principal and the climate the principal establishes. Without a climate of trust and respect, even the best pedagogy and structure will have marginal effect upon the success of each student." (p.3). Furthermore, this shift in leadership roles and responsibilities is echoed by Leithwood (2005). Leithwood identified three broad categories of effective principal practice: (1) setting direction, (2) developing people, and (3) redesigning the organization (pp. 11-13). Mirroring Valentine's (2001) conceptualization of transformational leadership, Leithwood (2005) differentiated between results-oriented instructional leadership and transformational leadership models based on the emphasis on developing the capacities of others.

Additionally, the shift has caused a change in the perception of principal leadership that, according to Boris-Schacter and Langer (2006), is contributing to a shortage of qualified principals. Based on a 2006 survey of over 200 principals, Boris-Schacter and Langer (2006) found that principals from differing ethnicities, gender, geographical regions, school levels, and tenure tracks all agreed that the principalship presented new challenges in today's educational context.

The principal's working conditions have also been modified in response to the virtual flood of reform efforts. These include organizational restructuring; increased accountability; and curricular innovations and instructional strategies that have been legislated by local, state, and federal agencies (Boris-Schacter & Langer, 2006, p. 9).

In an attempt to identify those leadership behaviors that define effective school leadership, Marzano, Waters, and McNulty (2003) undertook a meta-analysis of approximately 70 of the most rigorous studies focused on principal leadership and student achievement. The result was a list of 21 essential responsibilities supported by 66 identified practices that help to define Leithwood's (2005) broad categories of effective practice. The resulting *Balanced Leadership Framework* (Marzano, Waters, & McNulty, 2003) provided principals with a guide focused on knowing "when, how, and why to create learning environments that support people, connect them with one another, and provide the knowledge, skills, and resources they need to succeed" (p.2).

The effective principal must also work to create a relationship-based culture of collaboration. "Once effectively established," stated Valentine (2001), "the caring, collaborative culture becomes the support system that permits and promotes the internalization of comprehensive, systemic change." (p. 5). The skill set required for this shift from traditional

program-focused leadership to people-focused leadership (Whitaker, 2003) consists of the soft skills associated with the establishment and maintenance of social relationships.

Because instructional and cultural change is intensely interpersonal, it is essential that leaders consistently apply communication and problem-solving skills that promote productive relationships founded on qualities such as clarity of values and purpose, candor, trust, and integrity (Sparks, 2005 p. xiii).

Kouzes and Posner (2002) found that leadership is the "art of mobilizing others to want to struggle for shared aspirations" (p. 21). There exists a rapidly expanding body of research supporting the importance of leadership skills and behaviors based in relationships and the management of human emotions and motivation (Fullan, 2001; Goleman, 1998; Sparks. 2005). "It should come as no surprise then that the most effective leaders are not the smartest in an IQ sense but are those who combine intellectual brilliance with emotional intelligence" (Fullan, 2001, p.71).

Thus, a new leadership archetype combining underpinning effective leadership with emotional intelligence was proposed by Goleman, Boyatzis, and McKee (2002). The essence of what the authors referred to as "primal leadership" went beyond charismatic traits, position legitimacy, and power to foundational lynchpins of respect, empathy, and collaboration within the context of the social-emotional brain function.

Emotional Intelligence

The study of human emotions and feelings was, for many years, separated from the study of cognitive brain function. Intelligence was defined within the parameters of cognition as exercised within the frontal lobe, or cortex, of the brain (Dickman, Stanford-Blair, & Rosati-Bojar, 2004). Early research focused on human emotions depicted emotions within a negative

context. If not properly controlled, emotions would overcome intelligence and individuals would woefully succumb to less-than-desirable emotional influences (Schaffer, Gilmer & Schoen, 1940; Young, 1936).

As research into brain functioning progressed, the holistic nature of emotions as related to neural processes and connections between cognitive and motor processes was explored (Dickman,Stanford-Blair, & Rosati-Bojar, 2004; Izard, 2004; Izard & Buechler, 2002). Today, emotional intelligence theory is one of the newest tools for understanding leadership effectiveness and organizational performance (Bowman & Deal, 1997; Boyatzis & McKee, 2005; Goleman, 1998; Goleman, Boyatzis, & McKee, 2004; Morgan, 2006; Salovey & Mayer, 1990). "No doubt, humankind's original leaders – whether tribal chieftains or shamanesses-earned their place in large part because their leadership was emotionally compelling" (Goleman, Boyatzis & McKee, 2004, p.5).

The study of emotional intelligence is categorized in two main spheres of thought. The 1990 Salovey and Meyer conceptualization of emotional intelligence was an ability-based model and has been measured using the *Mayer-Salovey-Caruso Emotional Intelligence Test* (MSCEIT). Later studies done by Goleman (1998) and Boyatzis (1982) defined emotional intelligence in more individually (inductively based) based, perceptual terms Boyatzis and Goleman (2000) developed the *Emotional Competency Inventory* (ECI) as a measurement of emotional intelligence. Both theoretical approaches are similar in that each recognizes the critical importance of the awareness and regulation of emotions both personally and socially. Boyatzis and Goleman (2000) identified four clusters or quadrants of emotional intelligence competency. Each of these quadrants contained individual skills that could be identified, quantified, and developed appropriately in relation to the others.

While Boyatzis and Goleman (2000) focused on the development of individual competencies to better meet individual challenges, Salovey and Mayer (1990) identified three areas of emotion-based behaviors: (1) appraisal and expression of emotion within self and others, (2) the regulation of emotion in self and others, and (3) the creative utilization of emotional knowledge to direct the attention of and motivate others (p. 186). The Salovey and Mayer model is focused on the utilization of emotional competencies to problem-solve and regulate behavior. "Emotional intelligence allows for the accurate appraisal and expression of feelings ... These emotional appraisals, in turn, in part determine various expressions of emotion" (Salovey & Mayer, 1990, p. 191). Boyatzis and Goleman (2000) took an interpersonal approach to emotional competency while Salovey and Mayer stressed an intrapersonal approach (Stubbs, 2005).

Bar-on (1997) defined a differing set of emotional competency and behavior categories. Bar-on (1997) theory identified five overall emotional intelligence concepts: (1) intrapersonal intelligence, (2) interpersonal intelligence, (3) adaptability, (4) stress management, and (5) general mood. The Bar-on *Emotional Quotient Inventory* (1997) is a self report instrument that collects perceptual data in the subcategories similar to the Boyatzis and Goleman (2000) competencies.

Thus, the use of relationship-based behaviors and practices as a lens to view leadership in Missouri high schools provided a framework for conceptualizing effective school leadership as the balancing of high-yield administrative practices with people-based soft skills founded in the awareness and management of human emotions. Specifically, how these two behavioral perspectives interact to promote as well as support school improvement in order to positively impact student achievement was investigated.

Statement of the Problem

As high schools are required to raise levels of expectations and student achievement, the job of high school principal has transformed beyond managerial skill and instructional expertise to include relationship management requiring a set of emotions-based soft skills. Recent brainfunctioning research has established the link between cognitive and emotional intelligence (Goleman, 1998; Goleman, Boyatzis, & McKee, 2002) while research in the field of leadership (Blake & Mouton, 1985; Bolman & Deal, 1997; Bruffee, 1997; Davis, 2003; Doyle & Smith, 2006; Fullan, 2001; George, 2004; Hersey & Blanchard, 1997; Kouzes & Posner, 1987; Spillane & Camburn, 2006;) has placed emphasis on emotional competencies related to self and social emotional awareness and the regulation of emotions both personally and socially for the purpose of increasing leadership effectiveness.

Based on the definition of emotional intelligence as "a set of skills hypothesized to contribute to the accurate appraisal and expression of emotion in self and others, and the use of feelings to motivate, plan and achieve in one's life" (Salovey & Mayer, 1990, p.185), the purpose of existing emotional intelligence inventories focused on individual, rather than organizational improvement (Boyatzis, 1982; Goleman, 1998; Salovey & Mayer, 1990). While Fullan (2001) and Valentine (2001) both stressed the importance of relationship management in handling and implementing change. Few studies exist that explored the relationship between a leader's balance between administrative behaviors and practices and emotional strengths within the context of organizational improvement.

Whereas, one body of research recognized the importance of certain emotional competencies that seemed to lend themselves to leadership effectiveness (Goleman, 1998; Goleman, Boyatzis, & McKee, 2002; Fullan, 2001; Sparks. 2005), another collection of studies

identified effective leadership behaviors and practices (Leithwood, 2005; Waters, Marzano, & McNulty, 2003). Consideration of relational patterns between these two families of findings rarely appeared.

The 21st century culture of increased accountability as evidenced by NCLB has prompted a new era in educational leadership (Fullan, 2001; Sparks, 2005; Valentine, 2001; Whitaker, 2003). As a result, organizations are forced to make significant transformations in order to adapt and survive in this new world.

Therefore, the fundamental problem being addressed through and guiding this study was: what emotional competencies reinforce leadership behaviors and practices that augment school improvement efforts resulting in increased student achievement? Such a profile in relation to effective leadership at the high school level is lacking despite the necessity of emotionally-based leadership skills for twenty-first century effectiveness (Fullan, 2001; Marsh & Codding, 1998). According to Fullan (2000), the twenty-first century must move beyond traditional management to emotional management. "Managing emotionally means putting a high priority on reculturing, not merely restructuring...Reculturing, because it is based on relationships, requires strong emotional involvement from principals and others" (Fullan, 2000, pp. 160-161).

Purpose of the Study

The purpose of this study was to determine if differences in emotional intelligence levels are related to balanced leadership responsibilities as well as differences in leadership effectiveness. Specifically, the study assessed whether high school principals judged effective according to student achievement levels show evidence of stronger emotional competencies as related to leadership responsibilities. Thus, the intent of the research was to assess the emotional intelligence competencies of educational leadership at the high school level for the purpose of

identifying commonalities and suggesting a profile of desirable competencies that positively affect organizational performance.

Leadership is about a person having the ability to influence others. Two types of power are particularly important. There is the power that derives from an assigned, formal position. Then there is the power that arises out of the relationship between two people. This personal power that comes from a relationship is a key factor in effective leadership. A leader's personal power is the power freely given to the leader by others. Effective leaders focus on their personal power – their relationship power – more than their position power (Feldman, 1999, p. 2). "The leadership that counts," stated Sergiovani (2001) "is the kind that touches people differently. It [leadership] taps their [people's] emotions, appeals to their values, and responds to their connections with other people" (p. 270). Therefore, it is argued in this investigation that a comparison of leaders' emotional intelligence (EI) profiles will result in the identification of common emotional intelligence competencies that should positively influence organizational effectiveness.

Research Questions

The research questions that were explored and answered by means of this study were:

- 1. Is there a relationship between high school principals' perceptions of their emotional competencies, balanced leadership behaviors, and student achievement?
- 2. Is there a difference between the emotional intelligence profiles of high school principals in high achieving vs. low achieving schools?
- 3. Is there a difference between the balanced leadership behavior profiles of high school principals in high achieving vs. low achieving schools?

- 4. Is there a difference between the emotional intelligence profiles of female and male high school principals?
- 5. Is there a difference between the balanced leadership behavior profiles of female and male high school principals?
- 6. Does a profile exist combining gender, emotional intelligence competency, and balanced a leadership behavior that is related to effective leadership?

Limitations and Assumptions

Mixed method research utilizing both quantitative and qualitative data phases generates valuable information because "each has strengths and one approach can often overcome weaknesses of the other" (Patton, 1997, p. 267). Some research purists might consider the use of both quantitative and qualitative data collection and evaluation in one study as a limitation (Tashakkori & Teddlie, 1998) in as much as the each of the two paradigms is distinct in methodology and, therefore, incompatible (Guba & Lincoln, 1994). Other communities of researchers have argued that qualitative and quantitative data sets are not necessarily mutually exclusive and the appropriateness of combining the two within the parameters of a single study can be supported (Bullock, 1993; Firestone, 1987; Henderson, 1991; Merriam, 1988; Patton, 1990). Kidder and Fine (1987) stated, "There is nothing mysterious about combining quantitative and qualitative measures, this is, in fact, a form of triangulation that enhances the validity and reliability of one's study" (p. 72). Mixed-design research utilizing both quantitative and qualitative methods generates valuable information because "each has strengths and one approach can often overcome weaknesses of the other" (Patton, 1997, p. 267) This researcher has chosen to link qualitative and quantitative data for the purpose of adding breadth and depth to the subject of this study. However, due to the restrictions inherent in both types of studies, the synthesis of the two forms of data can result in seemingly contradictory findings (Patton, 1997).

Wiersma (2000) stated that regardless of the type of research, the limitations of the design should be described so that the reader is not misinformed. The researcher identified the following limitations:

- 1. The study sample was limited to public high schools within one Midwest state.
- 2. The strength of the quantitative data was limited by the degree of reliability and validity of the survey instrument.
- 3. The strength of qualitative data in terms of validity and reliability was limited by the researcher's own biases.

In addition, the researcher identified the following assumptions:

- 1. The participants were forthright in their responses.
- 2. The participants interpreted the survey instrument and interview questions as intended.

Design Controls

An explanatory mixed-design approach was selected for this study. First, a multiple choice questionnaire was used to quantitatively measure levels of strengths and weakness with regard to emotional intelligence competencies associated with principals in both high performing and low performing high schools and those competencies associated with effective school leadership as defined within the *Balanced Leadership* framework (Marzano, Waters, & McNulty, 2005).

Locating a survey that would adequately measure the correlates of both the *Balanced Leadership* framework (Marzano, Waters, & McNulty, 2005) and emotional intelligence (Boyatzis & Goleman, 2000), was problematic. Therefore, a survey was created by the

researcher. The survey was piloted with a small population of administrators to "reveal ambiguities, poorly worded questions, questions that are not understood, and unclear choices, and . . . indicate whether the instructions to the respondents are clear" (Fraenkel & Wallen, 2003, p. 404). Unclear questions and directions were corrected or eliminated prior to administration with the sample population.

Follow-up fieldwork was conducted inductively through a purposeful and convenience sampling in the form of follow-up interviews with principals and teachers from multiple school sites, which provided the researcher with personal insight into the participant's natural settings (Merriam, 1998). In support of Merriam's (1998) "emergent and flexible", (p. 8) qualitative design, interview questions evolved throughout the process. Additionally, areas of strengths and weaknesses were compared to levels of student performance in participating schools as determined be the Missouri Assessment Program Summative testing in communication arts.

The subjectivity of the study due to researcher bias was controlled through the use of survey triangulation with multiple interviews and school documents related to student achievement. The external validity of this study was strengthened through the use of rich, thick description so that readers could determine how realistically the findings generalized into their own context (Merriam, 1998).

Definitions of Key Terms

Commonly used terms within this study were defined as follows:

Balanced leadership framework (Marzano, Waters,, & McNulty, 2003) is a collection of 21 essential leadership responsibilities and 66 practices that have been found to have a statistically significant effect on student achievement. Identification of these responsibilities and

practices was based on the results of a meta-analysis of 70 studies that examined the effects of principal leadership on student achievement.

Emotional competence is the ability to regulate and manage emotions in oneself and others for the purpose of enhancing results. Assuming that emotional intelligence is the ability to recognize emotions in oneself and others, emotional competence refers to the ability to translate those emotions into appropriate behavior.

Emotional intelligence consists of the interaction of four constructs: (1) self-awareness - the ability to read one's emotions and recognize their impact; (2) self-management - the ability to control one's emotions and impulses and adapting to changing circumstances; (3) social awareness - the ability to sense, understand, and react to other's emotions; and (4) Relationship management - the ability to inspire, influence, and develop others while managing conflict (Goleman, 2005).

High School Principal is the major on-site administrator responsible for the daily operation of a secondary school.

Leadership is a process of intentional influence by one person over others to guide, structure, and facilitate (1) activities that promote purposeful change and (2) productive relationships within an organization.

Leadership effectiveness is the measure of the quality of movement by an organization toward an intended goal. Criteria for the determination of leader effectiveness include, according to Yukl (2006), variables such as group performance, attainment of group goals, group growth, group preparedness and persistence, subordinate satisfaction with the leader, and the psychological well-being and development of group members.

Mixed methods research is an approach that combines the collection and analysis of quantitative and qualitative data in separate phases of the overall study (Creswell, 2003).

Analysis of this mix of data aids in the discovery of the participants' understandings and perceptions (Godfrey, 2006), thus adding breadth to the study findings.

Mixed model research is an approach in which quantitative and qualitative approaches are mixed within or across the stages of the research process. The inclusion of open-ended questions with multiple choice questions within a survey instrument would be an example of a mixed model approach.

Rank is a relative position or standing among public high schools on a sequential scale of achievement levels for the grade 11 communication arts portion of the state assessment instrument.

Secondary school refers to any three- to six-year school serving students about 14 - 18 years of age. Four-year schools are by far the most common; their grade levels are designated freshman (9th grade), sophomore (10th), junior (11th), and senior (12th).

Student achievement. Each school's total percent of tenth grade students scoring in the proficient and advanced levels on the communication arts portion of the Missouri Assessment Program (MAP) as reported on the School District Report Card for 2007-2008.

Summary

Recent changes in federal legislation accompanied by the threat of lost funding created a sense of urgency within educational systems to orchestrate changes that would increase the achievement of all students. Public concerns including low achievement levels, high drop-out rates, and inadequate preparation for college underscore an ever growing sense of urgency at the high school level. It is the performance of the high school principal that has emerged as pivotal to the performance of his or her students (Young, 2007). Recent studies have suggested that those skills necessary for increased leadership effectiveness go beyond the administrative functioning to skill in establishing and maintaining relationships for the purpose of inspiring shared ownership and individual empowerment within a relationship-based culture of collaboration (Fullan, 2001; Sparks, 2005; Valentine, 2001; Whitaker, 2003).

In Chapter Two, an overview of literature is presented focused on the following constructs: (a) leadership effectiveness, (b) emotional intelligence, and (c) emotional competence. Presented in Chapter Three is a description of the research design and methodology, followed by the presentation and analysis of data in Chapter Four. Contained in Chapter Five are the findings, conclusions, and recommendations for future research.

CHAPTER TWO

Review of Related Literature

Introduction

The implementation of *No Child Left Behind* legislation in 2002, established stringent performance-based accountability measures for student achievement and forced state departments of education throughout the country to rethink educational programming and efficacy throughout the public school system. A 2004 government press release reported the number of states with federal accountability plans for public education increased from 11 in 2001 to 50 in 2004 (U.S. Department of Education, 2004). This accountability planning signaled a shift from what Marsh (2000) characterized as "a rule-driven to a results-driven system" (p. 128) of educational reform. "This shift will continue the expansion of leadership roles…needed within the school" (Marsh & Codding, 1998, p.128).

The shift to results-based planning triggered systemic change in educational programming, consequently, effective educational leadership has been redefined in terms of relationship-based covenants between leaders and followers (Fullan, 2001; Marsh& Codding, 1998; Marzano, Waters, & McNulty, 2005; Sergiovani, 2000). Components of effective leadership in the current "culture of change" (Fullan, 2001, p.xiii) go beyond measures of cognitive ability and technical expertise to include evidence of emotional understanding, awareness, and management (Fullan, 2001; Goleman, 1998; Sergiovani, 2000).

The purpose of this study was to explore the connection of emotional intelligence to effective leadership within the context of student achievement. In order to study emotional intelligence in association to leadership style and effectiveness, it was necessary to review existing literature in each area. The literature review consists of four constructs: leadership

theory, leadership effectiveness, emotional intelligence theory, and the measurement of emotional competence. The first section is a review of the evolution of organizational leadership theory defining effective leadership. Following section one is a discussion of leadership effectiveness and a synopsis of the balanced leadership (Marzano, Waters, & McNulty, 2005) connection between effective leadership practices and student achievement. Next, the study of emotional intelligence and a discussion of generally accepted theoretical models are presented.

Leadership

According to Kouzes and Posner (2003), "Leadership is not a fad. It's a fact. It's not here today, gone tomorrow. It's here today and here forever. True, the context has changed a bit over time, but leadership remains an understandable and a universal process" (p. xi). One query central to the volumes of research devoted to the elusive topic of effective leaders and leadership seems to be a definition of leadership. Yukl (2006) stated, "Leadership has been defined in terms of traits, behaviors, influence, interaction patterns, role relationships, and occupation of an administrative position" (p. 2).

Early trait theories of leadership focused exclusively on personal characteristics and attributes of leaders. Trait leadership studies tested participants, both leaders and followers, on a multitude of personal attributes ranging from intuition and energy levels to physical appearance and persuasive ability. One of the problems with early trait theory research was the underlying belief or assumption that a definitive list of personal characteristics would ensure leadership success with little or no consideration given to the situation (Doyle & Smith, 2006; Sadler, 1997). A second shortcoming of early trait studies was the tendency of researchers to mix and match a variety of behaviors, skills, and intellectual abilities in diverse compilations of effective leadership qualities and attributes (Doyle & Smith, 2006). Despite hundreds of attempts, trait-

focused research "failed to find any traits that would guarantee leadership success" (Yukl, 2006, p.12).

The 1950s witnessed a shift from searches for innate leadership characteristics to studies that looked at how effective leaders behaved. Research focus "moved from leaders to leadership" (Doyle & Smith, 2006, ¶ 11). Behaviors were categorized and classified. Researchers used descriptive methods of data collection including observations, journals, and interviews. Preferred methods included field study approaches that utilized behavior description questionnaires (Yukl, 2006). Questionnaires developed at Ohio State University (Fleishman, 1953) included the *Leader Behavior Description Questionnaire* (LBDQ) and the *Supervisor Behavior Questionnaire* (SDBQ). The Ohio researchers identified two broad behavioral categories: (a) initiating structure and (b) consideration. The categories were relatively independent of each other and behavior patterns in each were ranked high or low (Ohio State Studies, n.d.; Yukl, 2006). The result was a coordinate system of identification that foreshadowed the later work of situational leadership researchers including Hersey and Blanchard (1977) and Blake and Mouton (1985).

Similar studies at the University of Michigan (Katz & Kahn, 1952) identified three categories of effective leadership behaviors. The first two categories, task-oriented behavior and relations-oriented behavior, mirrored Fleishman's (1953) initiating structure and consideration categories. The third Michigan (Katz & Kahn, 1952) category was participative leadership. The participative category included facilitative behaviors that invited, encouraged, and respected team recommendations but protected the role of leadership to make the final decision (Ohio State Studies, n.d). The susceptibility of behavior description surveys to response bias and the misinterpretation of findings placed reliability and validity limitations on these studies (Yukl, 2006). The studies failed to identify any specific set of traits or behaviors universally successful

in all situations (Doyle & Smith, 2006; Yukl, 2006). As a result, researchers shifted focus from leader-centered studies to relational studies that defined leadership in terms of varying features that may prove effective in some situations but not in others.

Situational leadership theorists like Hersey and Blanchard (1977), directed research attention to contextual factors that influenced leadership behaviors. Situational leaders modified leadership behaviors based on the leader's perception of the follower, the situation, and themselves. Comparative studies were done that looked at contextual variables such as the nature of the task, the external environment, levels of competence, and role expectations (Yukl, 2006). Many of these early studies resulted in models similar to Hersey and Blanchard's (1997) Situational Leadership Model and Blake and Mouton's (1985) Managerial Grid Model. Both models mirrored task-oriented and relations-oriented behavior descriptions introduced by the earlier Ohio (Fleishman, 1953) and Michigan (Katz & Kahn, 1952) studies. These models tended to oversimplify the scope of leadership styles and behaviors and created more of an impression of reactive manipulation rather than effective leadership. Contextual factors beyond leader-follower interactions and relationships were not considered (Bolman & Deal 1997; Doyle & Smith, 2006). "Like Blake and Mouton, Hersey and Blanchard focus mostly on the relationship between managers and immediate subordinates and say little about issues of structure, politics, or symbols" (Bolman & Deal, 1997, p.302).

While one branch of situational research attempted to discern leadership practices that were similar or unique across varying contexts (Yukl, 2006), another branch, sometimes called "contingency theories" (Yukl, 2006, p.13), attempted to identify situational features that moderated "the relationship of leader attributes ... to leadership effectiveness" (Yukl, 2006, p.13). These types of contingency theories sought to "identify and categorize the variables and

relationships that comprise the most important aspects of leadership effectiveness" (Castro, 2003, p. 13).

While categorization is helpful for organization of thought, the definition of separate categories should not diminish the overlapping and intermingled concepts inherent in leadership theory. Yukl (2006) refined the definition of leadership identifying leadership as a process, not simply a set of qualities. A process-oriented definition is buttressed by the models of contemporary leadership practice described by Leithwood and Duke (1999). Transformational, participative, and managerial all refer to process behaviors.

Yukl's (2006) definition goes on to identify key leadership competencies including "the process of influencing others to understand and agree about what needs to be done and how it can be done effectively, and the process of facilitating individual and collective efforts to accomplish the shared objectives" (p. 7). It might be noted that the qualities that Loeb and Kindel (1999) identify as "key leadership abilities" (p. 11) parallel Yukl's (2006) process-based definition. These key skills include eliciting the "cooperation of others ... to buy into your vision," listening well in order to "gather many kinds of information from others," and placing "the needs of others above your own needs" (Loeb & Kindel, 1999, p. 9). Both of these definitions carry the underlying assumption that leadership, whether it is defined as a collection of qualities or a process, requires at least two parties, a leader and a follower.

Yukl (2006) implied a more inclusive relationship between leader and follower.

Leithwood and Duke (1999) explored alternative definitions of leadership and concluded that leadership is "a more or less complex set of relationships cohering around a core of common intentions" (p. 65). Fullan (2001), by including relationship building as one of the five essential components of effective leadership, emphasized the importance of positive leader-follower

interaction. This emphasis on leadership as an inclusive process was echoed further by Kouzes and Posner (2003) in their identification of five "common patterns of action" (p. 3) demonstrated by exemplary leaders. These practices included modeling the way, inspiring a shared vision, challenging the process, enabling others to act, and encouraging the heart.

The effectiveness of any leader goes beyond the identification of positive personal traits or knee-jerk reactionary behaviors. Successful outcomes depend on successful interaction between leader and follower. "In the past, if you asked someone in a successful enterprise what caused the success, the answer was 'It's the people.' But that's only partially true: it is actually the relationships that make the difference" (Fullan, 2001, p.51). The study of these relationships as related to successful outcomes requires going beyond simply examining "what has been achieved" to "how it has been achieved" (Rosete, 2005, p.7). The move to relationship-based studies of leadership represented an evolutionary progression in leadership research that provided additional depth and a deeper understanding of "the crucial difference between an average leader and effective leader" (Rosete & Ciarrochi, 2005, p. 390). Increasing emphasis on relationship management required more study of factors that influenced leader-follower interaction including role definition, power, and motivation (Davis, 2003; Rosete & Ciarrochi, 2005).

Davis (2003) described six categories of leadership theory based on the roles leaders play in relationship to followers. Power-influence approaches examined the nature of power relationships between leaders and followers. There are many sources of power including positional or legitimized power and the power that comes from the ability to control knowledge, resources, and agendas (Bolman & Deal, 1997). The underlying assumption of these studies was leaders used their power to influence the behavior of followers. The unidirectional nature of this

influence, "leaders act and followers react" (Yukl, 2006, p.12), characterized early power-influence studies. Later studies moved toward a shared power model of participative leadership (Fiedler & Garcia, 1987; Yukl, 2006). Transactional, transformational, and servant leadership theories are included in Davis' (2003) power-influence category.

Transactional leadership involves an equitable give-and-take relationship between leader and follower (Davis, 2003; Leithwood & Duke, 1999; Leithwood, Jantzi, & Steinbach, 2000; Yukl, 2006). The transactional leader acts under the assumption that subordinates are motivated by reward and punishment. Clear structures are established for task completion with the promise of reward for success (Burns, 1978; ChangingMinds, 2006; Yukl, 2006). The primary role of the subordinate is to follow the proper chain of command to complete tasks as instructed (ChangingMinds, 2006). "The primary influence process for transactional leadership is probably instrumental compliance" (Yukl, 2006, p. 254).

Despite Bass and Avillio's (1990) proactive spin of "looking for mistakes and enforcing rules to avoid mistakes" (Yukl, 2006, p.254), the behaviorist transactional approach to leadership is limited by the belief that money and simple rewards are enough to motivate subordinates with little regard to affective aspects of the human psyche (ChangingMinds, 2006). Transactional leaders function well within the structural and political frames of organizational leadership, but fall short of efficacy potential by ignoring the human resource and symbolic frames (Bolman & Deal, 1997). "Ideally, managers combine multiple frames into a comprehensive approach to leadership Wise leaders understand their own strengths, work to expand them, and build teams that can provide leadership in all four modes – structural, political, human resource, and symbolic" (Bolman & Deal, 1997, p.317).

Transformational leaders are symbolic leaders who are often seen as agents of change and possess the ability to look beyond self interests "toward higher and more universal needs and purposes" (Bolman & Deal, 1997, p. 314). Transformational leadership motivates followers to go beyond basic expectations to transform organizations (Davis, 2003; Leithwood & Duke, 1999; Leithwood, et al., 2000; Yukl, 2006). "There is also a tacit promise to followers that they will also be transformed in some way" (ChangingMinds, 2006). Servant leadership, an offshoot of transformational theory, expanded this promise.

In 1977, former AT&T executive Robert Greenleaf (2002), described a "less coercive and more creatively supporting" (p.23) leadership style that focused on service as the distinguishing characteristic of effective leadership practice. Greenleaf (2002) set forth two foundational premises for his servant leadership theory: attention to the needs of followers transforms the leader into a follower creating a duality of roles within the organization, and "the only authority deserving one's allegiance is that which is freely and knowingly granted by the led to the leader in response to, and in proportion to, the clearly evident servant stature of the leader" (Greanleaf, 2002, p. 24). Although some might consider placing Greenleaf's (2002) theory well beyond traditional transformation theory on any leader-follower relationship continuum, Greenleaf (2002) argued that the servant leader seeks a median position on such a continuum. The ideal point would represent a perfect balance of "individualism amid community" and "elitism with populism" (Greanleaf, 2002, p.26). This search for balance aligned with the emphasis that earlier transformational researchers placed on the importance of both transactional and transformational behaviors for managerial and organizational effectiveness (Alimo-Metcalfe, 2006; Bass, 1999). Greenleaf's (2002) duality of the leadership role transcended traditional transformational theory.

Although servant leadership theory has enjoyed a resurgence of popularity in recent years, little research has been conducted addressing Greenleaf's (2002) arguments.

Research has shown a positive relationship between effectiveness and transformational leadership in a variety of contextual settings (Bass, 1999). The power of transformational leadership is based in the leader's ability to sell a vision and convince subordinates to take part in creating that vision. "In order to create followers, the transformational leader has to be very careful in creating trust, and their personal integrity is a critical part of the package that they are selling" (ChangingMinds, 2006, ¶ 5). Fullan (2001) referred to this aspect of personal integrity as moral purpose – one of the five components of effective leadership. "Briefly, moral purpose means acting with the intention of making a positive difference in the lives of employees, customers, and society as a whole" (Fullan, 2001, p.3). Fullan's (2001) framework for leadership was built upon the basic components of the transformational leadership model with shadows of servant leadership theory. Fullan's (2001) framework consisted of three core concepts:

- The combination of five essential leadership components moral purpose, understanding change, relationship building, knowledge creation and sharing, and coherence making – executed with enthusiasm, energy and hope by the leader,
- 2. for the purpose of building follower commitment (both internal and external),
- 3. to make more good things and fewer bad things happen. (Fullan, 2001, p. 3).

Moral purpose provides a point of separation between the give-and-take model of transactional leadership and the deeper relationship-based models of transformational and servant leadership. Leithwood and Duke (1999) referred to this as moral leadership. Sergiovanni (2000) described the concept of moral purpose in leadership as the "life world of leadership" (p.17). The universality of Sergiovanni's (2000) "life world of leadership" (p.17) expanded the

realm of leadership beyond the mere construction of meaning described by Davis (2003) as the focal point of cognitive theories of leadership. Moral purpose also transcends the situational boundaries imposed in Davis' (2003) contingency leadership category (Kouzes & Posner, 2003; Leithwood & Duke, 1999; Leithwood, Jantzi, & Steinbach, 2000).

Recent additions to leadership theory echoed the search for balance between individualism and community addressed by Greenleaf's (2002) servant leadership theory. These theoretical perspectives include George's (2004) authentic leadership framework and Spillane's (2006) distributed leadership model. Both approaches attempted to balance and align individual and community characteristics and interests for the purpose of enhancing the effectiveness of leadership practices.

The concept of moral purpose as a cornerstone to effective leadership practice resounded throughout George's (2004) discussion of "authentic leadership" (p. 1). According to George (2004), authentic leadership has five essential dimensions: purpose, values, heart, relationships, and self-discipline. George (2004) stated that authenticity in leadership is characterized by the alignment of these individual leadership dimensions with a company's foundational characteristics including mission and vision (purpose), standards for operation (values), employee empowerment (heart), and commitment to excellence for all stakeholders (relationships and self-discipline). Evidence of individual and community dimensional alignment, continued George (2004), consists of a variety of measurable performance indicators including product innovations, superior customer service, sustained organizational growth, high levels of customer satisfaction, and increased share holder value.

Spillane and Camburn (2006) looked at principal leadership from a distributed perspective in examining the "distribution of leadership across people predominantly, though not

exclusively" (p.1). Based on a series of research studies funded by the National Science Foundation and the Spencer Foundation, as well as a longitudinal study designed to evaluate a leadership development program offered by the National Institute for School Leadership, the 2006 Spillane and Camburn study looked at schools at two levels, "the designed organization and the lived organization" (p, 7). The designed organization referred to the formal leadership positions, policies, and procedures while the lived organization referred to day-to-day practice (Spillane & Camburn, 2006). Distributed leadership was more often an element of the lived rather than the designed organization. Spillane and Camburn (2006) found that distributed educational leadership (a) differed greatly from one school to the next, (b) involved multiple formal and informal leaders, and (c) differed depending on the nature of the activity - administrative versus instructional

In a distributive perspective on leadership, three elements are essential:

- 1. Leadership *practice* is the central and anchoring concern
- 2. Leadership practice is generated in the *interactions* of leaders, followers, and their situations; each element is essential for leadership practice.
- 3. The *situation* both defines leadership practice and is defined through leadership (Spillane, 2006, p. 4).

Examination of the Spillane and Camburn (2006) analysis revealed links between these essential elements and the evolutionary development of leadership theory.

Spillane and Camburn's (2006) focus on practice reflected the shift from leaders as individuals to leadership behaviors (Doyle & Smith, 2006). The importance of interactions replicated the Michigan studies recognition of participative leadership (Katz & Kahn, 1952) as well as Fullan's (2001) discussion of the function of leader-follower relationships. Finally,

Spillane and Camburn's (2006) consideration of situational context reflected the situational leadership models of Hersey and Blanchard (1997) and Blake and Mouton (1985). Spillane's statement "the *situation* both defines leadership practice and is defined through leadership" (p.4) suggested the added dimension that Greenleaf (2002) referred to as a premise of servant leadership Greenleaf (2002) avowed that attention to the needs of followers transforms the leader into a follower creating a duality of roles within the organization. The only major benchmark on the leadership theory evolutionary continuum missing from Spillane and Camburn's (2006) distributed leadership framework is an emphasis on "moral purpose" (Fullan, 2001, p. 3).

Consisting of varying combinations of leadership behaviors and practices identified over the course of the evolution of leadership theory, neither the authentic leadership frameworks (George, 2004) nor Spillane and Camburn's (2006) distributed leadership model were supported by extensive quantitative or qualitative research findings. Instead, George (2004) and Spillane and Camburn (2006) based their theories on personal case studies and selected historical anecdotes and stories that described the behaviors of various successful organizational leaders. Whatever the mixture of these leadership behaviors and values, successful leadership for change presupposes a shift from the hierarchical leader-centered culture foundational to early leadership theory to the participative and relationships-based culture of transformational leadership styles (Fullan, 2001).

Another of the theoretical categories described by Davis (2003) included relationships based on the ability of leaders to create shared meanings through culture management. Morgan (1998) defined organizational culture as "the values, ideas, beliefs, norms, rituals, and other patterns of shared meaning that guide organizational life" (p.7). Bolman and Deal (1997) cited similar characteristics of organizational culture as part of the symbolic frame of organizational

analysis. Schein (2004) probed deeper into the meaning of organizational culture by adding the dimension of shared common assumptions that form the basis for normal organizational activity and functioning. Culture management theories of leadership stressed the importance of leadership skills and practices that created and celebrated contextual norms of behavior to promote desired organizational outcomes. Fullan (2001) referred to this type of cultural management as "reculturing" (p. 44). "Transforming the culture - changing the way we do things around here - is the main point" (Fullan, 2001, p. 44). Bruffee (1997) referred to a similar process of reacculturation as part of knowledge creation. According to Fullan (2001), this type of knowledge creation and sharing through the process of reculturing is an essential component for effective leadership.

While educational leadership can certainly be considered a subset of organizational leadership, the unwillingness to discard any child, as the 2001 *No Child Left Behind* legislation emphasized, created the foundation for a culture different from other types of organizational products that, if defective, are rejected. Thus, measures of educational leadership effectiveness must go beyond leader-follower relationships and consider the added dimension of student achievement. "Leadership to promote and implement educational change has not been uniform. Knowledge about the qualities of the individuals who have successfully implemented such strategies has been minimal" (SEDL, n.d., p. 1).

Measures of Leadership Effectiveness

Definitions of leadership effectiveness are as elusive as definitions of leadership (Bolman & Deal, 1997; Yukl, 2006). Kouzes and Posner, (2003) argued that successful leadership is a measure of how well the leader gets along with others. Using surveys, case studies, and interviews, the Kouzes and Posner, (1987) study identified five practices of effective leadership.

Those practices included "challenging the process, inspiring a shared vision, enabling others to act, modeling the way, and encouraging the heart" (Kouzes & Posner, 1987, pp. 10-12). These five practices were the basis for Kouzes and Posner's *Leadership Practices Inventory* (LPI). While this Kouzes and Posner, (1987) interpersonal yardstick aligned well with the foundational relationship component of recent leadership theories described above, researchers have identified several other variables intrinsic to calibrating effectiveness. These variables included contextual and situational characteristics like organizational size and complexity as well as leadership style (Blake & Mouton, 1985; Bolman & Deal, 1997; Hersey & Blanchard, 1977).

Yukl (2006) described three measures of leader effectiveness. Yukl (2006) argued that the most common practice was an objective measurement based on "the extent to which the leader's organizational unit performs its task successfully and attains its goals" (Yukl, 2006, p 8). A second common indicator, stated Yukl (2006), consisted of an assessment of "the attitude of followers toward the leader" (p. 8). Finally, Yukl (2006) identified a measure used less often for assessing leader efficacy. Consideration of a "leader's contribution to the quality of group processes, as perceived by followers or by outside observers" (p.9) included the evaluation of a leader's efforts to augment group functioning, growth, and development.

The suggestion that leadership effectiveness is contingent on group performance was the basis for Fielder's (1967) Contingency Leadership Model. In conjunction with his model, Fielder (1967) created the *Least Preferred Co-worker* (LPC) assessment of leadership style. Not a true measure of leadership effectiveness the LPC scale scores provided correlational evidence matching effective leadership style with situational variables including leader-member relations, task structure, and leader position power (Fielder, 1967).

Leadership assessment instruments were as numerous as the schools of thought related to leadership style. Instruments similar to the LPI and LPC focused on the identification of leadership attitudes and behaviors within the context of particular theoretical constructs as described above. The purpose of these instruments was to provide information to leaders that would be used to increase effectiveness. Goleman (2000) argued "the most effective leaders switch flexibility among leadership styles as needed ... such leaders don't mechanically match their style to fit a checklist of situations" (p. 13). Finding common efficacious ground within the existing wealth of leadership theories requires the consideration of an objective-based standard of measurement. Yukl (2006) stated "it is difficult to evaluate the effectiveness of a leader when there are so many alternative measures of effectiveness it is not clear which measure is most relevant" (p. 9). Within the field of public education, student achievement serves as a critical gauge of leader efficiency (SEDL, n.d.).

In 1998, *Mid-continent Research for Education and Learning* (McREL) began a research project focused on school and instructional factors affecting student achievement. The project consisted of a meta-analysis of existing research on characteristics and practices related to student achievement (Marzano, Waters, & McNulty, 2003). Information was gathered and analyzed in three categories – student characteristics, teacher practices, and leadership practices. Although a number of studies had been conducted focused on school effectiveness, findings indicated only a vague connection between leadership and successful schools. According to Marzano, et al. (2003), the "notion of instructional leadership remained a vague and imprecise concept for many school leaders charged with providing it" (p.2). The results remained theoretical and fragmented. "None of this advice for leaders … was derived from the analysis of large sample of quantitative data" (Marzano et al., 2003, p.2). The McREL study focused on a

large quantity of existing quantitative data and the resulting "balanced leadership framework" included "concrete responsibilities, practices, knowledge, strategies, tools, and resources that principals and others need to be effective leaders" (Marzano, Waters, & McNulty, 2003, p.2). The McREL study was the first to find a "substantial relationship" between leadership and student achievement. Researchers identified "21 specific leadership responsibilities significantly correlated with student achievement" (Marzano, Waters, & McNulty, 2003, p.3).

Each of the leadership theories reviewed previously in this chapter contributed at least one of the balanced principal's responsibilities. Personal traits such as "visibility" and "optimizer" (Marzano, Waters, & McNulty, 2003, p.4) were included in the list. "Situational awareness" (Marzano, Waters, & McNulty, 2003, p.4) reflected aspects of theorists including Katz and Kahn (1952), Fleishman (1953), Hersey and Blanchard (1977), Blake and Mouton (1985), and Spillane (1985). Consideration of "culture" (Marzano, Waters, & McNulty, 2003, p.4) and culture management were considered by Bruffee (1997), Schein (2004), and Fullan (2001). Strong "ideals/beliefs" (Marzano, Waters, & McNulty, 2003, p.4) were the basis of George's (2004) authentic leadership model. Transactional leadership theories were represented by the "contingent rewards" (Marzano, Waters, & McNulty, 2003, p.4) responsibility. The inclusive aspect of participative leadership studies including Fielder and Garcia (1987), Fielder (1967), and Kouzes and Posner (2003) aligned with the "input" (Marzano, Waters, & McNulty, 2003, p.4) component of balanced leadership. The emphasis on vision and challenging the system argued by Kouzes and Posner (2003) aligned with Marzano's et al., (2003) "change agent" and "optimizer" (p.4) components. Bass and Avillio's (1990) proactive stance of anticipating and preventing mistakes runs parallel to the balanced leader's ability to monitor and evaluate instructional practices. Finally, the emphasis placed on relationships by Leithwood and

Duke (1999), Fullan (2001), Greenleaf (2002), and Spillane (2006) was echoed as a major component of the Marzano et al., (2003) balanced leadership model.

The presence and strength of each of these 21 responsibilities can be measured with the *Balanced Leadership Profile 360*TM *Survey*. The survey is "the result of initiatives which have included the development and field-testing of self-reported principal survey items designed to address identified leadership indicators and subsequent factor analysis investigations" (McREL, 2006, ¶ 4). Part II of the instrument (SECLB) used in this study was based upon the balanced leadership responsibilities.

The inclusion of interpersonal interactions and relationships in most, if not all, of the later leadership studies including the comprehensive balanced leadership project, accentuated the importance of a leader's ability to work with others in pursuit of a common goal. Emotional and social competence is a requirement of successful leader-follower interaction (Fullan, 2002, Goleman, 1995). The study of effective leadership, therefore, requires the investigation of the links between emotion, intelligence, and emotional competence.

Emotional Intelligence

In the initial decades of the twentieth century, emotions and emotion-driven behaviors carried negative connotations. "One tradition in Western thought has viewed emotion as disorganized interruptions of mental activity, so potentially disruptive that they must be controlled" (Salovey & Mayer, 1990, p. 185). At the beginning of the twentieth century, psychological study and research progressed in two separate schools - cognition (intelligence) and personality (emotions) (Sternberg, 2000). As research into the workings of the human brain expanded, these two schools of study merged and emotions came to be viewed as "organized responses, crossing the boundaries of many psychological subsystems, including the

psychological, cognitive, motivational, and experiential systems ... [that are] adaptive and ... can potentially lead to a transformation of personal and social interaction into enriching experience" (Salovey & Mayer, 1990, p. 186).

Consideration of emotional understanding and control as an aspect of intelligence dated back to 1920 when E. L. Thorndike identified three facets of intelligence: (a) abstract intelligence or idea management, (b) mechanical intelligence or concrete objects, and (c) social intelligence or people skills (Sternberg, 2000). Little attention was paid to the concept by most psychological researchers. A few, however, began to recognize domains of intelligence beyond cognition-based models.

As early as 1937, Thorndike and Stein (1937) wrote about social intelligence. A few years later, Wechsler (1940) described intelligence as a combination of intellective (cognitive) and non-intellective (social) elements. Early studies within the realm of social intelligence focused on the identification, description, and assessment of social behaviors. As social intelligence studies increased in number, the focus shifted to discovering the motivation behind socially competent behaviors and the function of such behaviors in effective social interaction (Zirkel, 2000). "The early definitions of social intelligence influenced the way emotional intelligence was later conceptualized" (Bar-On, 1997, p. 1).

As the body of research related to social intelligence grew, several terms emerged to describe the social-emotional dimension of intelligence. Each study seemed to coin a new phrase. Bagby, Parker, and Taylor (1994) described the concept of alexithymia or the apparent lack of emotion. Green, Goldman, and Salovey (1993), Mayer and Gaschke (1988), and Russell (1979) reported on pleasant-unpleasant affectivity. Sternberg and Caruso (1985) studied practical

intelligence while Andrews and Robinson (1991) considered the concept of subjective well-being (Sternberg, 2000).

The independence of social intelligence from other types of intelligence such as abstract and mechanical intelligences was not ... readily demonstrable. One problem was that social intelligence was defined so broadly so as to blend imperceptibly into verbal and visual/spatial intelligence (Salovey & Meyer, 1990, p. 188).

The emergence of social intelligence studies evidenced the rejection of intelligence as a "unitary ability" (Sternberg, 2000, p.44). The representation of intelligence as a multidimensional scaffolding of physical, cognitive, and affective functioning became one of the foundational assumptions underpinning Gardner's (1983) theory of multiple intelligences. Unlike Sternberg's (1985) triarchic theory of analytic, creative, and practical intelligences, Gardner's (1983) theory of multiple intelligences focused "more on domains of intelligence and less on mental processes" (Sternberg, 2000). Strengths and preferences for any or all of Gardner's (1983) eight domains of intelligence developed as the result of "interactions between one's biological predispositions and the opportunities provided by one's environment" (Sternberg, 2000, p.44). Gardner (1983) distinguished between (a) interpersonal - relating to the interactions between individuals - and (b) intrapersonal - occurring within the individual, domains of intelligence. Block and Kreman (1996) echoed this differentiation when they investigated the "connections and separateness" (p.349) of the constructs of intelligence and what they identified as "ego-resiliency" (1996). Ego-resiliency emphasized the ability of individuals to "equilibrate and re-equilibrate in response to their ever-changing being and ever-changing world" (p.349). This distinction established a basis for the development of emotional intelligence theories (Wells, Torrie, & Prindle, 2000).

The term emotional intelligence was first introduced in a dissertation written by Wayne Leon Payne in 1986. Payne (1986) described emotional intelligence as "a faculty of consciousness heretofore overlooked" (¶ 1). Payne (1986) argued

the mass suppression of emotion throughout the civilized world has stifled our growth emotionally, leading us down a path of emotional ignorance. Indeed, many of the problems facing society today are the direct result of emotional ignorance: depression, addiction, illness, religious conflict, violence, and war...we have the wrong idea altogether about the nature of emotion and the important function it serves in our lives (¶ 2).

Payne's (1986) study offered a framework for developing emotional intelligence by raising questions about emotion, providing a language to communicate about emotion, and "providing concepts, methods and tools for developing emotional intelligence" (¶ 2).

Goleman (1995) popularized emotional intelligence as a learned skill that served as a more accurate predictor of life success than cognitive measures or technical ability. Goleman's theory of emotional intelligence built on Payne's (1986) work as well as the Gardner's (1983) multiple intelligences theory. Similarly, Bar-On (1997) based his conceptualization of emotional intelligence on Gardner's work.

In contrast to Goleman's (1995) four clusters of general abilities – self-awareness, social awareness, self-management, and relationship management, Bar-On's (1997) model consisted of five separate domains: intrapersonal skills, interpersonal skills, adaptability, stress management, and general mood. Both models reflected the distinctive base established in Gardner's (1983) multiple intelligence theory.

Both the Bar-On (1997) and Goleman (1995) models are categorized as mixed models of emotional intelligence. Mixed-model approaches were personality-based frameworks that took into account a broad range of skills and traits related to emotions (Webb, 2004). The mixed models "include not just emotional abilities, but also abilities that emotions and management of emotions can facilitate" (Webb, 2004, p.11). Caruso (2005) referred to these mixed models as "non-intelligence" (p.3) approaches based on traits such as assertiveness, socio-emotional traits, and emotional competencies. Caruso argued that these models were based in personality and dispositional traits rather than aspects of true intelligence. Moreover, he proposed that the term emotional intelligence "be reserved for intelligence or ability-based models" (p. 3).

Emerging from a developmental mode of intelligence, ability models defined emotional intelligence as a form of intelligence encompassing emotion related abilities. At the forefront of emotional intelligence ability models is the work of Salovey and Mayer (1990). That model was based on the assumption that thought and emotion "worked together in adaptive ways" (Caruso, 2005, p.6). "The model [Salovey and Mayer, 1990] is intelligence-based, and it is related to other, standard intelligences" (Caruso, 2005, p. 6). In contrast to the detailed lists of emotional competencies described by the mixed-models, the Salovey and Mayer (1990) ability model identified four emotional abilities.

We first accurately identify emotions. Second, we use the emotions to influence how we think and what we think about. Third, we attempt to understand the underlying causes of these emotions and determine how these emotions will change over time. Finally, we manage with emotions by integrating the wisdom of these feelings into our thinking, decision making actions (Caruso, 2005, p.7).

A comparison and alignment of model components is presented in Table 1.

Table 1:

Comparison and Alignment of Emotional Intelligence Model Components

Bar-On	Goleman	Mayer and Salovey
Intrapersonal	Self-Awareness	Emotion Facilitates Thinking
Emotional Self-Awareness	Emotional Self-Awareness	Self-Management of Emotion
Assertiveness	Self-Confidence	
Independence	Self-Assessment	
Self-Actualization	Self-Management	
Adaptability	Adaptability	
Flexibility	Initiative	
Problem-Solving	Achievement Orientation	
Interpersonal	Social Awareness	Perceive/Identify Emotions
Empathy	Empathy	
Social Responsibility	Service Orientation	
		Management of Emotions
Relationships	Social Skill	(others)
	Developing Others	
	Building Bonds	
Stress Management	Conflict Resolution	
General Mood		
Optimism	Visionary Leadership	

No matter which model is considered, the move toward participative, interactive, and relationship-based leadership evidenced above necessitates the study of the connections between emotional competency and effective leadership. Leadership, though not a true domain of emotional intelligence, requires emotion-based skills to facilitate effective leadership practice (Webb, 2004).

Daily emotions experienced by individuals, leaders or subordinates, are "inextricably bound up with other people in social worlds, with one of the most powerful of those being the work context" (Rafaeli & Worline, 2001, p. 95). With the emphasis on accountability and performance, it seems appropriate for the purpose of this study to use a performance-based assessment of emotional intelligence to determine a leader's emotional competence within the context of his or her work environment.

Emotional Competence

Initial attempts to measure and assess emotional intelligence were surveys based on the mixed trait and personality components of the Bar-On (1997) and Goleman (1995) models. The oldest instrument, *Bar-On's Emotional Quotient Inventory* (EQ-I) (Bar-On, 1997), was originally created in a psychological clinical context for the purpose of assessing personal qualities that contributed to emotional well-being (Cherniss, 2000). Early studies using the EQ-I were unable to prove any predictive value attached to the instrument. The Goleman-based *Emotional Competence Inventory* (ECI) was created by Boyatzis, Goleman, and Rhee in 2000. It is a 360 degree instrument completed by people who know the individual being evaluated. As was the case with the EQ-I, "there is currently no research supporting the predictive validity of the ECI" (Cherniss, 2000, p. 9). Some of the drawbacks to the validity and predictive value of instruments similar to the EQ-I and ECI were described by Daus and Ashkanasy (2003), "these two

approaches [Bar-On, 1997 & Goleman, 1995] have generated assessment devices that are based on self-report, yielding self- and other-perceptions of these traits rather than an estimate of a person's actual emotional ability" (p.3).

The Schutte Self-Report Inventory (SSRI) created by Schutte and colleagues in 2001 was an attempt to capture more than personality traits. The SSRI measured typical behaviors within the contexts of "perception of emotion, regulation of emotions, and utilization of emotions" (Webb, 2004, p.14). Though not a true ability measure, the SSRI was based on Salovey and Mayer's (1990) early research and represented a bridge between the personality-based instruments of Bar-On (1997) and Goleman (1995) and the ability-based assessment of Mayer, Salovey, and Caruso (2002).

The ability model of emotional intelligence as created by Mayer and Salovey (1990) "views emotions and thought as working with each other in adaptive way" (Caruso, 2006, p.6).

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. (Mayer et.al, 1999, p.267)

The *Mayer, Salovey, Caruso Emotional Intelligence* Test (MSCEIT) measured the four components of emotional intelligence discussed above (see Table 2.1). The MSCEIT provided subsets for each of these four components for a total of 141 items related to eight performance-based tasks (Rosete, 2005). A participant's ability to problem-solve and accomplish each task revealed strengths and weaknesses in each of the four ability areas.

The intent advanced in this study to compare the results of Part I of the study survey (SECLB), based on a compilation of emotional competencies as described above (Bar-On, 1997; Caruso, 2006; Goleman, 1995; Mayer et.al, 1999; & Schutte, 2001) and Part II of the study survey (SECLB), based on the balanced leadership competencies (Marzano et al.,2003). The alignment of these factors within the context of this study is shown in Table 2. The researcher chose not to include two of the 21 responsibilities in the functional categorization process. This decision was based on the nature of these particular responsibilities. Responsibilities 12, involvement in curriculum, instruction, and assessment, and 13, knowledge of curriculum, instruction, and assessment, both refer to a specific content-related knowledge base. Thus, functional categorization was deemed inappropriate.

Table 2: Emotional Competency Categorization of the Balanced Leadership Responsibilities

Emotional Competency Category	Balanced Leadership Responsibilities		
Perceiving Emotions	9. Ideals/Beliefs		
(self-awareness)	10. Input		
	17. Outreach		
	18. Relationships		
Using Emotion to Facilitate Thought	2.Change Agent		
(self-management)	5. Culture		
	8. Focus		
	11. Intellectual Stimulation		
	15. Optimizer		
	21. Visibility		
Understanding Emotion	1. Affirmation		
(social awareness)	6. Discipline		
	14. Monitoring Evaluation		
	20. Situational Awareness		
Managing Emotion	3. Contingent Rewards		
(relationship management)	4. Communication		
	7. Flexibility		
	16. Order		
	19. Resources		

Summary

The purpose of this chapter was to present a review of literature related to the evolution of organizational leadership theory, the definition and measurement of effective leadership, emotional intelligence, and the measurement of emotional competence. Also established was a theoretical basis for the use of a survey instrument based on the balanced leadership framework Marzano et al., 2003) and the categorization of emotional competencies (Bar-On, 1997; Caruso, 2006; Goleman, 1995; Mayer et.al, 1999; & Schutte, 2001).

Provided in Chapter Three is a description the context and methodology of the research design employing these instruments. The content includes a statement of purpose, study questions, a description of the sample population, a description of data gathering methods, and a summary. The rationales for selecting a mixed model research approach and support for the design are addressed. Collected data is presented and analyzed in Chapter Four. Included in Chapter Five is a listing of the findings and conclusions as well as recommendations for further research.

CHAPTER THREE

Research Design and Methodology

Introduction

The 1983 publication of A *Nation at Risk* (U.S. Department of Education, National Commission on Excellence in Education) sparked a nationwide interest is school reform initiatives focused on increasing student achievement (Fullan, 2005; Sergiovanni, 2000). The next twenty years witnessed a myriad of reform efforts that, for the most part lacked true accountability measures beyond local administration (Fullan, 2005). Although reading and math performance increased slightly, gaps between high achieving and low achieving systems were not diminished (Fullan, 2005). The existence of these inequities in achievement between varying subgroup populations had prompted more rigorous federal legislation. The passage of the *No Child Left Behind* (NCLB) legislation in 2002 established stringent performance-based accountability measures backed by threatened federal program funding losses. The result has been an increased focus on student achievement by state departments of education as well as district administration. Educational planners throughout the country are being forced to rethink educational programming and efficacy throughout the public school system.

This shift in focus from management and oversight of educational programming to results-driven school improvement based on the achievement levels of all students has redefined leadership behaviors. Effective educational leadership was redefined in terms of relationship-based covenants between leaders and followers (Fullan, 2001; Marsh, 2000; Marzano, Waters, & McNulty, 2005; Sergiovani, 2000) requiring skill sets that went beyond measures of cognitive ability and technical expertise to include evidence of emotional understanding, awareness, and management (Fullan, 2001; Goleman, 1998; Sergiovani, 2000).

The development of such relation-based skill sets constitutes the growth of an individual's emotional intelligence. Exploration of the connection of emotional intelligence to effective leadership within the context of student achievement requires the comparison of the strength of emotional intelligence competency to those leadership behaviors proven to be most effective. In Chapter Three, the rationale for the use of a mixed-method study design is provided, followed by a description of the population and sample. Data collection and instrumentation are explained, along with the resulting methods of data analysis. Finally, the researcher's own biases and assumptions are articulated to provide the reader insight as to the perspectives that might have influenced the study.

Research Questions

The investigative pursuit of this study was to examine the relationship of emotional competencies to those leadership behaviors and practices that enhance and promote school improvement efforts resulting in increased student achievement. The definition of such an emotional profile in relationship to effective leadership at the high school level is lacking despite the necessity of emotionally-based leadership skills for twenty-first century effectiveness (Fullan, 2001; Marsh, 2000). Investigation for this study began with an analysis of both the emotional profiles as well as the leadership behavior profiles of all the principals sampled in relation to levels of student achievement.

The first concept to be examined was the relationship between perceived levels of emotional competence and leadership effectiveness as measured in terms of student achievement.

Next, data were gathered to examine the differences between emotional intelligence profiles and leadership behavior profiles. Then the investigation was expanded to include triangulation and

descriptive data gathered in the form of subordinate feedback from selected schools in relation to individual leader's behaviors and actions.

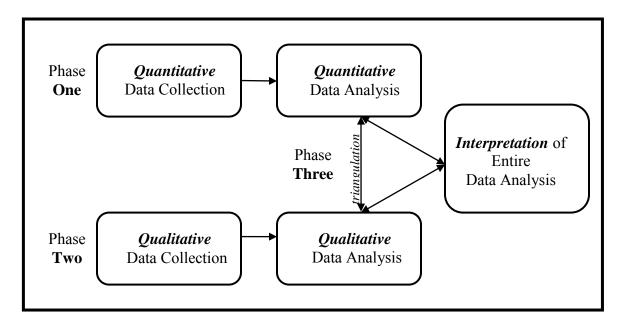
The research questions that were explored and answered by means of this study were:

- 1. Is there a relationship between high school principals' perceptions of their emotional competencies, balanced leadership behaviors, and student achievement?
- 2. Is there a difference between the emotional intelligence profiles of high school principals in high achieving vs. low achieving schools?
- 3. Is there a difference between the balanced leadership behavior profiles of high school principals in high achieving vs. low achieving schools?
- 4. Is there a difference between the emotional intelligence profiles of female and male high school principals?
- 5. Is there a difference between the balanced leadership behavior profiles of female and male high school principals?
- 6. Does a profile exist combining gender, emotional intelligence competency, and balanced leadership behavior that is related to effective leadership?

Rationale for Use of a Mixed Methods Design

A mixed methods design was selected for this study for the purpose of expanding the body of knowledge concerning the connection between balanced leadership responsibilities, emotional intelligence components, and student achievement through the collection of quantitative data supported and enhanced with the compilation of associated qualitative data. Alignment with the sequence of the mixed research process (Figure 1) as suggested by Johnson and Christensen (2004) and Creswell (2003) required a discussion of the rationale for choosing a mixed methods design.

Figure 1. Mixed Design Study Sequence



The feasibility of combining quantitative and qualitative data within a single study has been a topic of inquiry since1959 when psychological researchers began using multiple methods to study the validity of psychological traits (Creswell, 2003; Datta, 1994; Fraenkel & Wallen, 2003, Henderson & Bedini, 1993; Tashakkori & Teddlie, 1998). The design of the present study falls into the last of four approaches for combining data analysis techniques within mixed methods research as described by Tashakorri and Teddlie (1998). A comparison of the four approaches is presented in Table 3 In this type of expansion mixed methods study, quantitative data were collected and analyzed to begin the study followed by collection and analysis of qualitative data.

Table 3
Approaches for Combining Data Analysis Techniques Within Mixed Methods Designs

Approach	Description
1) Simultaneous	Using quantitative and qualitative data analyses on the same data simultaneously
2) Confirmation	Confirming/expanding the results from one method of data analysis (e.g., quantitative) through a secondary analysis of the same data using a different approach (e.g., qualitative).
3) Constructive	Using, sequentially, the findings obtained through one approach to data analysis (e.g., quantitative) as a starting point for the analysis of other data generated via an alternative approach (qualitative).
4) Expansion	Utilizing the results of one approach to data analysis as a starting point for developing subsequent data collection strategies or collecting/analyzing new data using another approach (e.g., expanding on questionnaire findings using qualitative interviews).

Study design is strengthened through the use of results from one method to assist in analyzing the findings from the other, thus, providing ease in describing and interpreting the overall results. One disadvantage of mixed models design is the extended time frame necessary to conduct both quantitative and qualitative data collection (Creswell, 2003). The researcher chose this method to provide rich qualitative detail to further explain the results found through quantitative data analysis.

Interpretation of data collected incorporated both quantitative and qualitative methodology. Quantitative data based on the *Self-Assessment of Emotional-Based Competencies and Leadership Behaviors* (SECLB) provided statistical representations of discrepancies and relationships between variables for an enhanced understanding of certain occurrences that might be useful in the examination of other educational settings (Fraenkel & Wallen, 2003). The inability of this statistical measure to capture the real differences among education settings (Patton, 1997) was offset through the use of qualitative data collected through principal interviews and focus group sessions that provided descriptive accounts of context-specific incidents such as specific emotional and behavioral characteristics of interactions between leaders and subordinates (Bogdan & Biklen, 1998).

The addition of qualitative data to quantitative within a study is especially effective when the investigator hoped to gain insight into specific relationship-based interactions when the boundaries between the occurrences and context were not openly evident (Merriam, 1998). Thus, a sequential expansion mixed design approach (Creswell, 2003) was important for the quantitative examination of the variables related to self-perceived balanced leadership responsibilities and emotional competencies as well as the qualitative support through descriptive data provided by subordinates.

Population and Sample

The target population for this study included principals from 544 (total number of public high schools within the state) high schools throughout a Midwestern state. The researcher chose a nonrandom, purposive sampling of the target population. A purposive sample consists of subjects selected on the basis of some characteristic (Patton, 2002). Patton (2002) proposed sixteen scenarios constituting purposive sampling. The sampling method chosen for this study was one of maximum variation. Subjects were chosen in an effort to accommodate a wide range of variation for the purpose of identifying common patterns that cut across variations (Patton, 2002).

The sampling plan was two-phased. The first phase involved ranking the 544 high schools by levels of student performance on the state achievement testing in communication arts. From this ranked list, those 105 high schools comprising the top 20% and those 105 high schools representing the bottom 20% were included in the sample population. The extreme variance in achievement levels represented by this sample served to highlight shared patterns or differences between the subjects and facilitated data interpretation with regard to the research questions.

The second and qualitative phase of the study involved a purposeful, random sample of six principals for interview and a random selection of 12 teachers for follow-up focus-group interviews in two buildings representing one high and one low achieving school. Principals who were surveyed in the first phase were provided with a detached form to complete if they were willing to participate in a follow-up interview with the researcher to share their experiences. An additional form was attached allowing the principal to permit a focus group interview by the researcher with a random selection of volunteer subordinate teachers and staff at their schools.

The returned forms were numbered and a randomization was run to select three principals from high performing schools and three principals from low performing schools for interview.

Although random subject selection was not typical for qualitative research, Merriam (1998) suggested that the validity of the study would be strengthened when random selection was possible.

Data Collection

The researcher followed three ethical guidelines for the protection of human subjects of research including protection of participants from harm, assurance of the confidentiality and security of research data, and avoidance of deceiving subjects involved in the research (Creswell, 2003; Fraenkel & Wallen, 2003) Due to the nature of the research topic and the vulnerability of principals in low performing schools, care was taken to explain the purpose of the study, to respect the personal beliefs of the participants, and to ensure confidentiality of the data (Creswell, 2003). Superintendents of all participating principals received and signed consent forms, granting permission for principals' participation in this study.

Signed informed consent forms acknowledged study subjects' rights to voluntarily participate in the study, to withdraw from participation at any time, to ask questions, and to have confidentiality respected throughout the research project (Creswell, 2003). No research was conducted without signed letters of informed consent during both survey and follow-up interview phases. All responses were coded to assure that confidentiality of subjects was protected. This consent met with the approval of the Human Subjects Review Committee of the University of Missouri – Columbia. Both the survey and the follow-up interviews were conducted by the researcher in the absence of district administrators and were strictly voluntary with the option to

withdraw at any time without repercussion. Correspondingly, the researcher facilitated follow-up focus group interviews in the absence of building administration. Contributors had the right to ask questions and obtain results, and their privacy was respected. All responses were coded for confidentiality, with the exception of the voluntary self-identification of principals willing to take part in follow-up interviews. The identity of the interviewees was protected through the use of pseudonyms, the scheduling of interviews at locations suggested by the interviewees, and the filtering of identifying information from the findings (Creswell, 2003).

Instrumentation

Four sources of data were used for this study. Data for this inquiry came from a survey, interviews, focus groups and achievement scores.

Self-Assessment of Emotion-Based Competencies and Leadership Behaviors

First, a survey instrument, *Self-Assessment of Emotion-Based Competencies and Leadership Behaviors* (SECLB), was created for this study to determine the disposition of emotional intelligence and effective leadership behaviors in high school principals. Survey statements were based on emotion-based characteristics aligned with the mixed model emotional intelligence (Bar-On, 1997; Goleman,1995) and the 21 leadership responsibilities identified by Marzano, Waters, and McNulty (2003) and incorporated in the *Balanced Leadership* framework (Marzano, Waters, & McNulty, 2003). The items of the SECLB were organized into two sections that represent the emotional-based competencies (30 items) and the leadership behaviors (42 items).

Emotion-based competency items constituted Part 1 of the SECLB survey. The 30 items were divided into four subscales aligned with Goleman's (2000) quadrants of emotional intelligence competency- self-awareness, social awareness, self-management, and relationship

management (Apendix E). Balanced leadership responsibility (Marzano, Waters, & McNulty, 2005) behavior descriptors constituted Part 2 of the SECLB survey. The 42 items were divided into four subscales based on behavior arenas – interpersonal context, intrapersonal context (Bar-On, 1997), organizational context (intra-organizational), and external context (inter-organizational) (Appendix E).

The items of the *Self-Assessment of Emotion-Based Competencies and Leadership Behaviors* (SECLB) were scored by assessing a value from 1 to 7 indicating a range from the item not being done at the school to always being practiced. The reliability of the SECLB was assessed through correlational analyses involving test-retest and internal consistency of items, subscales, and the total score. When conducting research using a researcher created survey instrument such as the SECLB, the reliability and validity of the contents of the survey needed to be verified.

The researcher, utilizing test-retest reliability which determined the degree that scores are consistent over time (Gay, 1996), assessed the reliability of the SECLB. A pilot study protocol (Appendix A) was provided as a critique guide for pilot participants. The survey was administered two times to the same group of 20 educators within a three week interval. Feedback from the pilot group was collected with the pilot study protocol form. Once analyzed, no changes beyond editing and format errors were made to the survey instrument. The score sets from the survey administration were correlated using the Pearson coefficient (r) to establish the stability for the reliability of the survey. A high coefficient of stability was the criteria for good test-retest reliability. The correlation established was a high coefficient of stability, (r = -.84), indicating the reliability of the survey (Horner et al, 2004).

Content validity for the survey was determined by examining characteristics validated through research. In part one of the survey the characteristics of emotional competencies were presented and validated through a myriad of research (Bar-On, 1997; Caruso, 2006; Goleman, 1995; Mayer et.al, 2002; Schutte et al, 2001). Characteristics of leadership similar to those in the SECLB were described and presented in other research (Fullan, 2001; Marsh, 2000; Marzano, Waters, & McNulty, 2005; Sergiovani, 2000) involving leadership in part two of the survey.

The determination of leadership behavior item placement in subscale categories was made as the result of an affinity activity process conducted with a group of school administrators and university-based teacher and administrator educators. Internal reliability for each of the subscales was tested suing Cronbach alpha analyses: interpersonal (14 items) $\alpha = .848$, intrapersonal (11 items) $\alpha = .841$, organizational context (10 items) $\alpha = .846$, and external context (7 items) $\alpha = .698$. Although the external context alpha value was below .70, the researcher determined that the score was close enough to ideal value to allow item LB10 (Table 4) to remain a part of the subscale.

Table 4

External Context Item Statistics

SECLB Item #	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item- Total Correlation	Cronbach's Alpha if Item Deleted
LB2	32.88	14.237	0.601	0.641
LB10	33.93	13.331	0.276	0.713
LB11	33.36	12.424	0.542	0.627
LB15	33.94	14.396	0.283	0.696
LB19	34.36	13.981	0.385	0.671
LB26	33.94	12.312	0.493	0.640
LB40	33.16	14.070	0.430	0.661

Consideration was also given to the number of items in each of the subscales. Deletion of item LB10 would have resulted in only 6 items in the external context category and increased the gap in category item balance.

Interview Protocols

Data were collected from five participating principals through an interview protocol.

The semi-structured interviews were conducted to gain deeper insight and triangulate the data gathered from the survey and focus groups. Face-to-face and/or telephone interviews with five purposefully selected principals (3 from high achieving schools and 2 from low achieving schools) were conducted. The first part of the interview protocol was developed in regards to emotional competencies. The second portion of the interview protocol was developed from the research on leadership behaviors and practices. These semi-structured interviews were conducted

consisting of both experience-based and opinion-based open-ended questions (Fraenkel & Wallen, 2003).

Each interview was audio recorded and later transcribed by the researcher. Participant checking was conducted to verify the accuracy of the transcripts and confirm for each participant that their stories were portrayed as intended (Fraenkel & Wallen, 2003). The researcher took field notes during the face-to-face interview process to record information not reflected on the audio-tapes. Triangulation of the data occurred through the use of rich, thick descriptions provided from the interviews and field notes (Creswell, 2003).

Focus Group Protocol

The researcher also facilitated two focus group meetings to gather data from the teachers. One focus group was composed of teachers (n=12) from a high performing high school the other a group of teachers (n=15) from an identified low performing school. All participants volunteered for the focus groups. The focus group protocol was selected because, as noted by Krueger and Casey (2000), "a range of ideas or feelings that people have" (p. 24) was necessary. The teachers were asked to participate based on being determined as information-rich participants (Krueger & Casey, 2000). The focus groups' conversations were audio recorded and transcribed by the researcher at a later date. The focus group took place at the high school site lasting less than one hour. The facilitator used slightly modified questions based on the same focus of questions as used in the interview protocol for the high school principal.

Achievement Data

In addition to the survey, achievement data were collected from an existing Department of Elementary and Secondary Education (DESE) database in the form of a report ranking the state's public high schools by performance level. Performance scores were based on the

following criteria: grade 11 state assessment results in communication arts; the communication arts scale score for all students was averaged for each school, 2004, 2005, and 2006; and the report sheet had the grade 11 (2004-2006) rankings.

Data Analysis

Data analyses is the use of a myriad of techniques to analyze the data collected (Fraenkel & Wallen, 2003). The data analyses involved in this inquiry included several measures used by the researcher for examining both the quantitative and qualitative data. Each research approach, quantitative and qualitative, was initially analyzed separately, and then merged in the discussion of the research findings utilizing the characteristics of emotional competencies and balanced leadership responsibilities. The central premise of this mixed-design study was to examine the extent of any relationship between emotional intelligence competencies, balanced leadership responsibilities and effective leadership as defined by student achievement. This proposition received some support in the literature, but further empirical validation was needed.

Quantitative Data Analysis

Phase one of a three-phase data (Figure 1) analysis process was a quantitative inquiry that examined the data obtained from the SECLB and student achievement scores. The data were tabulated and then analyzed using the SPSS Version 18.0. The following statistical methods were applied to each of the quantitative research questions.

Research Question 1

The data from participant surveys were tabulated and analyzed. Pearson *r* correlation techniques were used to determine if emotional competencies and balanced leadership responsibilities had a relationship with student achievement. The Predictive Analytics SoftWare (PASW) Statistics 18 program was utilized to determine the correlation between the independent

and dependent variables. For this study, the independent variable was the level of achievement as defined by two categories (high vs. low performing school) for student achievement and measured by grade 11 state achievement test results in communication arts. The dependent variables were the two sets of characteristics: emotional competencies and balanced leadership responsibilities. A critical value of .05 was used to determine the statistical significance.

Research Questions 2 and 3

In order to determine if there was a difference in the levels of emotional competencies and balanced leadership responsibilities of high school principals from high and low performing schools an one-way analysis of variance method (ANOVA) was used (Green & Salkind, 2003). To determine if a statistical difference in each of the two subscales (emotional competencies and balanced leadership), or dependent variables, existed between the two categories, or the independent variable, in which the schools were sorted, an ANOVA was used (Green & Salkind, 2003). With the schools sorted into the two predetermined groups, each score for each subscale or characteristic was evaluated for significant differences. A critical value of .05 was used to determine the statistical significance.

The second source, an existing DESE database, was used to gather a student achievement indicator. For this study, the overall school achievement indicator was the rank based on the grade 11 state assessment in communication arts achievement, across the years 2004-2006.

Research Questions 4 and 5

Similarly, the task of determining a difference in the levels of emotional competencies and balanced leadership responsibilities of female and male high school principals, was accomplished with the use an one-way analysis of variance method (ANOVA) (Green & Salkind, 2003). To determine if a statistical difference in each of the two subscales (emotional

competencies and balanced leadership), or dependent variables, existed between the two categories, or the independent variable (gender), in which the principals were sorted, an ANOVA was used (Green & Salkind, 2003). With the schools sorted into the two predetermined groups, each score for each subscale or characteristic was evaluated for significant differences. A critical value of .05 was used to determine the statistical significance.

Research Question 6

Once again, an ANOVA (Green & Salkind, 2003)was used to determine if there was a difference in the levels of emotional competencies and balanced leadership responsibilities of high school principals from four groups representing the four possible combinations of the two independent variables (achievement level and gender). With the principals sorted into the four predetermined groups, (1) female, high achieving, (2) female, low achieving, (3) male, high achieving, and (4) male, low achieving, each score for each subscale or characteristic was evaluated for significant differences. A critical value of .05 was used to determine the statistical significance.

As with questions one and two, an existing DESE database, was used to gather a student achievement indicator. For this study, the overall school achievement indicator was the rank based on the grade 11 state assessment in communication arts achievement, across the years 2004-2006.

Qualitative Data Analysis

Phrase three of the data collection involved qualitative data analysis gathered from the interviews and focus groups. In order to triangulate the data, semi-structured interviews were conducted with five principals. This information was used in tandem with the focus group data compiled in order to gain a greater understanding of the phenomena being studied. In order to

maintain consistency of direction, the researcher was the only interviewer in this study (Wiersma, 2000). Analysis of follow-up principal and focus group interviews were conducted in order to find a deeper contextual meaning for the construct of effective leadership. Data from the interviews were also used to triangulate and enrich the data obtained from the surveys to answer research questions.

Interviews were transcribed in order to assist in the process of making sense of the data. The transcripts were read in their entirety to obtain an overview of the participants' perceptions. The transcripts were coded for statements related to the emotional competencies and balanced leadership responsibilities used in creating the *Self-Assessment of Emotion-Based Competencies* and *Leadership Behaviors Survey* and the themes reflected in research questions.

Also included in the qualitative data were written comments found on the surveys. The data gradually evolved into patterns which allowed the researcher to analyze the resulting information in each category (Creswell & Clark, 2006; Merriam, 1998). These patterns were used to provide support and substance to the quantitative statistical analyses. Patterns were reviewed through the framework of the research questions. Member checking and triangulation of data were used to validate the findings (Creswell, 2003; Merriam, 1998).

Finally, the data from both the quantitative and qualitative phases of the study were integrated to the extent possible to provide insight concerning the relationship between emotional intelligence components, balanced leadership responsibilities and effective leadership (Creswell, 2003; Fraenkel & Wallen, 2003).

The Researcher's Biases and Assumptions

The topics addressed in this study were readily influenced by the researcher's embedded beliefs and values (Fraenkel & Wallen, 2003). Therefore, it was important for

the reader to be aware of the author's implicit frame of reference and perspective (Fraenkel & Wallen, 2003).

One underlying assumption made by this researcher was that principals want to provide effective leadership for teachers and staff resulting in the high levels of student performance required through federal and state mandates. In addition, the principal's leadership behaviors impact everything that happens in a school. This assumption was based on the researcher's personal perceptions through contacts made in working with principals representing a wide variety of school settings.

Moreover, it was the researcher's belief that teachers want to do what is best for their students and often look to building leadership for assistance in improving practices. Efficacy in this instructional leadership role will impact student learning and corroborate the importance of the principal as a responsible leader.

A final predisposition of the researcher was that leadership was not a position of authority and had less to do with power than with relationships (Ogawa & Bossert, 1995). Therefore, it was important to consider diverse points of view and contextual representations of leadership behaviors and responsibilities beyond self perceptual reports.

Credibility and Consistency

In a mix design, reliability, internal validity, and external validity of procedures are viewed through the following corresponding terms: (a) auditability, (b) credibility, and (c) fittingness (Rudestam & Newton, 2001). Bogdan and Biklen (1998) contended that qualitative researchers measure reliability by "the fit between what they record as data and what actually occurs in the setting under study, rather than the literal consistency across different observations" (p. 36). Yin (2003) suggested three important principles vital to a mix design investigation which

will enhance auditability, credibility, and quality [fittingness]. These principles included the use of: (a) various evidentiary sources which are similar with the same set of specifics, results, and conclusions; (b) a data base detached from the research report; and (c) an evidentiary sequence which denotes linkages between research questions asked, collected data, and drawn conclusions.

Merriam (1998) further supported the enhancement of consistency by thorough use of multiple sources of evidence In order to enhance reliability the researcher must: (a) explain theoretical underpinnings and assumptions underlying the study; (b) triangulate data; (c) develop an audit trail; (d) code raw data clearly and consistently in order for replication to arrive at similar conclusions (Merriam, 1998; Yin, 2003). The researcher maintained a journal of the qualitative process that established an audit trail or data base separate from the study report.

Credibility was enhanced through the use of multiple data sources which permitted the process of triangulation. Participants reviewed data [member check] for congruency of fit between what was the intended stakeholder response in relation to what was reported by the researcher.

Exclusively this researcher conducted interviews in order to encourage consistency. Individual interviews were semi-structured, open-ended, and transcribed verbatim. Data were coded clearly and consistently into themes and were further analyzed through the constant comparative method. Analysis was ongoing throughout each stage of the data collection process.

Summary

Provided in Chapter Three is the information related to the design and methodology used to carry out this investigation into the relationship of emotional competencies with those leadership behaviors and practices that enhance and promote school improvement efforts resulting in increased student achievement. A rationale was provided for the use of a mixed design research method. The population and sample were described, as well as data

collection and instrumentation. The three-phased data analysis was articulated, along with the researcher's biases and assumptions. Within Chapter Four, the data analysis and research findings are presented. Included within Chapter Five is a discussion of the research findings, conclusions, and recommendations for future research.

CHAPTER FOUR

Presentation and Analysis of Data

Introduction

Presented in Chapter Four is a summary of the findings from the data gathered by the researcher over the course of this study. The intent of this study was to examine the differences in emotional intelligence levels as related to balanced leadership responsibilities as well as leadership effectiveness. Specifically, the study assessed whether high school principals judged effective according to student achievement levels in communication arts show evidence of stronger emotional competencies as related to leadership responsibilities.

The study was conducted in three phases as presented in Chapter Three. Phase one consisted of the collection and analysis of quantitative data. Phase two consisted of the collection and analysis of qualitative data for the purpose of triangulating phase one data results. Phase three was the interpretation of both phase one and phase two data analyses. This chapter describes the quantitative data collected. Chapter Five presents a discussion of the quantitative data with the inclusion of collected qualitative data following an expansion approach to mixed-method study design (Tashakorri and Teddlie, 1998). The expansion approach was taken for the purpose of enhancing the results of the quantitative data collected as presented in this chapter through the analysis of additional qualitative data aligned with quantitative data constructs.

Data Collection and Sample Population

The research tool used to gather data for this investigation was the *Self-Assessment of Emotion-Based Competencies and Leadership Behaviors* (SECLB), a survey created by the researcher as explained in Chapter Three. Relevant literature provided the foundational constructs for both intent and content of the SECLB. Conceptual validity and technical reliability

of the instrument were determined by means of a test-retest prefatory pilot study described in Chapter Three.

The SECLB survey included two scales. The first scale, Part One of the survey, had four subscales aligned with the components of emotional intelligence, (a) self-awareness, (b) social awareness, (c) self management, and (d) relationship management. The second scale, Part Two of the survey, had four subscales aligned with relational behavioral arenas, (a) intrapersonal, (b) interpersonal, (c) organizational context, and (d) external context. A listing of survey items by subscale can be found in Appendix F.

The SECLB survey provided a seven-point Lickert type scale to elicit high school principals' rating of their emotional intelligence competence as well as their leadership behavior propensity. The SECLB included a demographic section for the purpose of collecting data to stratify the sample and create a descriptive profile of the respondent population. Collection of study data was initiated after the validity and reliability of the survey were tested and the instrument was determined suitable to conduct quantitative research as described in Chapter Three. The study was pre-authorized by the Institutional Review Board (IRB) of the University of Missouri-Columbia.

Data Analysis

Sample Population Demographics

A description of how the survey was conducted in terms of sample population was given in Chapter Three. The rate of return was 66% as indicated in Table 5.

Table 5

Rate of Return of the "Self-Assessment of Emotion-Based Competencies and Leadership

Behaviors – SECLB" Survey

	Initial	Replies	Missing	Total	Percent
	Mailing	Received	Permission	Usable	Usable
School Districts Invited					
to Participate	203	162	13	149	73%
Sample Population of					
School Principals	149	102	4	97*	66%

Note: Cases with partially missing data were automatically excluded from the *PASW* Software.

Note: Data listed in table represent SECLB survey results

Participants who completed the demographic section of the survey provided the following data. The predominant gender in the sampling was female (Figure 2).

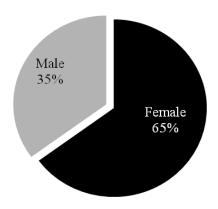


Figure 2. Reported gender data of school principals.

In terms of achievement levels as a measure of leader effectiveness, 57% of the sample population represented high achieving schools while 43% represented low achieving schools. This sample distribution is illustrated in Figure 3.

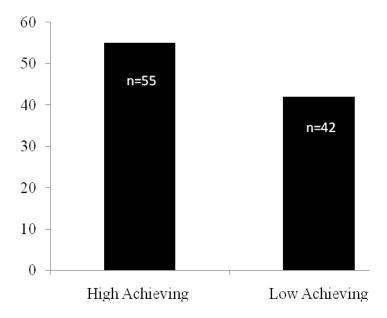


Figure 3. Distribution of participants by achievement level.

To facilitate a multivariate approach to analysis of quantitative data that were collected in this study, four demographic subgroups combining gender and achievement categories were created. These four groups were (a) female principals from high achieving schools, (b) female principals from low achieving schools, (c) male principals from high achieving schools, and (d) male principals from low achieving schools. 39% of the sample populations of principals were females from high achieving schools. 26% were females from low achieving schools. 16% were males from high achieving schools. 19% were males from low achieving schools. This distribution is illustrated in Figure 4.

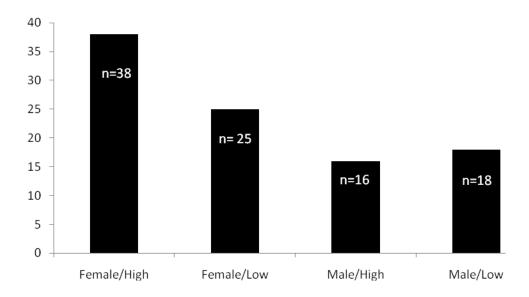


Figure 4. Distribution of principals in relation to gender and achievement levels.

The review of literature pertaining to the fields of leadership and emotional intelligence revealed the importance of emotional competencies in increasing leadership effectiveness (Blake & Mouton, 1985; Block & Kreman, 1996; Bolman & Deal, 1997; Bruffee, 1997; Caruso, 2005; Davis, 2003; Doyle & Smith, 2006; Fullan, 2001; Gardner, 1983; George, 2003; Goleman,1995; Hersey & Blanchard, 1997; Kouzes & Posner,1987; Spillane & Camburn, 2006; Rafaeli & Worline, 2001; Salovey & Mayer, 1990; Webb, 2004). The *Self-Assessment of Emotion-Based Competencies and Leadership Behaviors* – SECLB survey was intended to capture some evidence of the relationship between emotional intelligence competencies and effective leadership behaviors. "Perceptions are important," stated Bernhardt (1998), "since people act in congruence with what they believe, perceive, or think about different topics" (p.14).

Collected responses to the SECLB survey were entered in the Predictive Analytics SoftWare (PASW) Statistics 18 program. A seven-point Likert type scale allowed a broader range of incremental choices for participants to rate their perceptions of personal and organizational behavioral alignment with emotional intelligence competency and balanced

leadership behavior descriptors. The research design included two independent variables, (a) level of achievement as a measure of leadership effectiveness (categorical) and (b) gender (categorical). The two dependent variables incorporated in the study were (a) measure of emotional intelligence competency (quantitative) and (b) measure of balanced leadership responsibilities (quantitative).

Summary Analytic Procedures

Descriptive statistics were used to profile the sample and investigate each of the research questions. Pearson r correlations were used to determine the direction and strength of possible relationships pertaining to question one.

Answers to the second and third research questions were sought by means of a t-test for independent groups. Categorical determinations were made using level of student achievement resulting in two groups, (a) principals from high achieving schools and (b) principals from low achieving schools. Groups were compared using the quantitative variables (a) emotional intelligence competency and (b) balanced leadership behaviors based on SECLB survey scores. The significance level was set at $p \le 05$.

Similarly, answers to the fourth and fifth research questions were sought by means of a t-test for independent groups. Categorical determinations were made using gender resulting in two groups, (a) female principals and (b) male principals. Again, groups were compared using the quantitative variables (a) emotional intelligence competency and (b) balanced leadership behaviors based on SECLB survey scores. The significance level was set at $p \le 05$.

Resolution of research question six was attained using a one-way analysis of variance (ANOVA). Categorical determinations were made by creating a third categorical variable, gender/achievement level. Gender/achievement level groups were identified based on possible

combinations of level of student achievement and gender. This resulted in four groupings, (a) female principals from high achieving schools, (b) female principals from low achieving schools, (c) male principals from high achieving schools, and (d) male principals from low achieving schools. Groups were compared using the quantitative variables (a) emotional intelligence competency and (b) balanced leadership behaviors based on SECLB survey scores. The significance level was set at $p \le 05$.

According to Goleman (2000), an emotional competency "is a learned capability based on emotional intelligence that results in outstanding performance at work" (p. 24). Marzano, Waters, & McNulty (2005) identified 21 leadership responsibilities and 66 corresponding behaviors with statistically significant correlations to student achievement. Statistical results of this study were interpreted within the context of these understandings.

Representation of High School Principals' Emotional Intelligence Competencies

Part one of the SECLB survey addressed behavior indicators of emotional competence quadrants, (a) self-awareness, (b) social awareness, (c) relationship management, and (d) self-management (Goleman, 1995; Goleman, et al, 2002). A summary of participant mean scores for each of the emotional intelligence competency quadrants is presented in Table 6 below.

Table 6

Overall Comparison of Emotional Intelligence Competency Quadrant Means

	N	Mean	Std. Deviation
Self-Awareness	97	5.88	0.44
Social Awareness	96	5.61	0.54
Relationship Management	95	5.54	0.57
Self-Management	96	5.48	0.68

Similarities in mean scores coupled with variances in standard deviation values prompted the researcher to conduct an analysis of response frequency percentages of individual items by subscale. This frequency analysis is illustrated in Table 7. The response frequency analysis showed a total of four perceived strengths (total response frequency of percentage \geq 80% for choices 6 and 7) in social awareness; item 5 (97%), item 13 (80%), item 24 (93%), and item 30 (88%).

The remaining three subscales, (a) social awareness, (b) relationship management, and (c) self-management, revealed no individual item strengths (total response frequency of percentage $\geq 80\%$ for choices 6 and 7). Examination of item strengths may aid in determining areas of focus for emotional intelligence competency support and development.

Table 7
Comparison of Response Frequency Percentages of Emotional Competency Items by Subscale

	Item		Never		So	metime	 S		Always
Subscale	Number	N	1	2	3	4	5	6	7
Self-	2	98				8.2	31.6	45.9	14.3
Awareness	5	98					3.1	31.6	65.3
	6	98		1.0	5.1	17.3	26.5	37.8	12.2
	8	98		1.0		10.2	24.5	41.8	22.4
	13	98				4.1	16.3	32.7	46.9
	17	98			1.0	13.3	32.7	38.8	14.3
	22	97		1.0	3.1	13.4	29.9	39.2	13.4
	24	97				1.0	6.1	34.7	58.2
	28	98			2.0	14.3	25.5	39.8	18.4
	30	98				3.1	9.2	54.1	33.7
Social	3	98			1.0	5.1	18.4	49.0	26.5
Awareness	10	98		2.0	3.1	10.2	28.6	42.9	13.3
	14	97			3.1	14.4	42.3	30.9	9.3
	15	98			2.0	9.2	31.6	43.9	13.3
	19	98		1.0	2.0	17.3	33.7	31.6	14.3
	23	98			3.1	9.2	17.3	43.9	26.5
	26	98			2.1	10.3	23.7	39.2	24.7
	27	98			1.0	6.1	23.5	49.0	20.4
Relationship	4	98		1.0	2.0	23.5	39.8	31.6	2.0
Management	7	98		2.1	5.2	17.7	44.8	21.9	8.3
	9	98		1.0	1.0	10.2	29.6	44.9	13.3
	18	98			3.1	12.2	38.8	38.8	7.1
	20	97				1.0	12.4	27.8	58.8
	21	98		2.0	9.2	13.3	31.6	29.6	14.3
	25	97		1.0	1.0	4.1	19.6	46.4	27.8
	29	98			1.0	11.2	24.5	40.8	22.4
Self-	1	98			4.1	10.2	27.6	50.0	8.2
Management	11	98			6.1	12.2	24.5	42.9	14.3
	12	97			1.0	15.5	32	39.2	12.4
	16	98		1.0		15.5	25.8	41.2	16.5

Representation of High School Principals' Balanced Leadership Behaviors

Part two of the SECLB survey addressed indicators of balanced leadership behaviors (Marzano, Waters, & McNulty, 2005) by relational behavior arenas, (a) interpersonal, (b) intrapersonal, (c) organizational context, and (d) external context. A summary of participant mean scores for each of the relational behavior arenas is presented in Table 8 below.

Table 8

Means Summary of Balanced Leadership Behaviors by Relational Behavior Arenas

	N	Mean	Std. Deviation
Interpersonal	95	5.45	0.64
Intrapersonal	97	5.46	0.67
Organizational Context	97	5.69	0.63
External Context	95	5.61	0.60

Note: Data listed in table represent SECLB survey results

As was the case with Part One of the SECLB, Similarities in mean scores coupled with variances in standard deviation values prompted the researcher to conduct an analysis of response frequency percentages of individual items by subscale. This frequency analysis is illustrated in Table 9 (interpersonal and intrapersonal contexts) and Table 10 (organizational and external contexts).

Table 9
Comparison of Response Frequency Percentages of Balanced Leadership Behavior Items by
Interpersonal and Intrapersonal Subscales

	Item		Never			Someti	imes		Always
Subscale	Number	N	1	2	3	4	. 5	6	. 7
Inter-	4	97		2.1	2.1	14.4	36.1	39.2	6.2
personal	5	97		3.1	7.2	16.5	32	28.9	12.4
	6	97		1.0	7.2	19.6	38.1	26.8	7.2
	16	96		2.1	4.2	13.5	34.4	35.4	10.4
	17	97		3.1	5.2	16.5	28.9	26.8	19.6
	18	97	1.0	1.0	5.2	17.5	25.8	35.1	14.4
	24	97	1.0	2.1		5.2	15.5	40.2	36.1
	25	97		1.0	3.1	10.3	17.5	49.5	18.6
	27	97		1.0	3.1	11.3	32.0	38.1	14.4
	29	97		1.0	6.2	23.7	24.7	35.1	9.3
	30	97			7.2	16.5	18.6	37.1	20.6
	32	97			2.1	16.5	25.8	38.1	17.5
	36	96		1.0	3.1	11.5	24.0	42.7	17.7
	41	97				1.0	19.6	44.3	35.1
Intra-	1	98				1.0	19.4	55.1	24.5
personal	3	97			1.0	11.3	17.5	47.4	22.7
	7	97		1.0	1.0	17.5	32	36.1	12.4
	8	97		3.1	8.2	24.7	19.6	36.1	8.2
	9	97		1.0	6.2	6.2	23.7	40.2	22.7
	12	97			2.1	9.2	26.8	41.2	20.6
	23	97	1.0	3.1	7.2	27.8	32	25.8	3.1
	28	97			2.1	13.4	21.6	43.3	19.6
	35	97		1.0	2.1	15.5	34	34	13.4
	39	97		6.2	7.2	22.7	18.6	32	13.4
	42	97			2.1	14.4	17.5	44.3	21.6

Table 10

Comparison of Response Frequency Percentages of Balanced Leadership Behavior Items by

External and Organizational Contexts Subscales

	Item		Never			Somet	imes		Always
Subscale	Number	N	1	2	3	4	5	6	. 7
External	2	97					9.3	45.4	45.4
Context	10	97		1.0	9.3	16.5	21.6	32	19.6
	11	97			3.1	9.3	16.5	39.2	32
	15	97		1.0	3.1	12.4	40.2	32.0	11.3
	19	97		1.0	6.2	23.7	38.1	30.9	
	26	96	1.0	2.1	3.1	10.4	34.4	38.5	10.4
	40	96				5.2	15.6	42.7	36.5
Organi-	13	97		1.0		5.2	10.3	37.1	46.4
zational	14	97				13.4	28.9	44.3	13.4
Context	20	97				12.4	30.9	43.3	13.4
	21	97	1.0		3.1	15.5	28.9	40.2	11.3
	22	97		1.0	4.1	9.3	20.6	34.0	30.9
	31	97			1.0	15.5	37.1	41.2	5.2
	33	97			2.1	10.3	29.9	41.2	16.5
	34	97			1.0	5.2	24.7	52.6	16.5
	37	97	1.0	2.1	4.1	10.3	23.7	39.2	19.6
	38	97				5.2	12.4	39.2	43.3

Response frequency analysis of the balanced leadership behavior item subscales showed a total of four perceived strengths (total response frequency of percentage \geq 80% for choices 6 and 7). No strengths were found in the interpersonal subscale, although item 41 did receive a total of 79% of the responses at levels 6 or 7. Item 1 emerged as a strength (80%) in the intrapersonal subscale, while item 2 (91%) contained in the external context subscale proved to be the strongest item in the balanced leadership section. Two items, item 13 (83%) and item 38 (84%) were identified as strengths in the organizational context subscale.

A comparison of response frequency percentages for emotional intelligence competency items and balanced leadership behavior items reveals similar response patterns. These patterns are illustrated in Figure 5. Further analysis of the relationship between these two areas will be presented in the sections that follow.

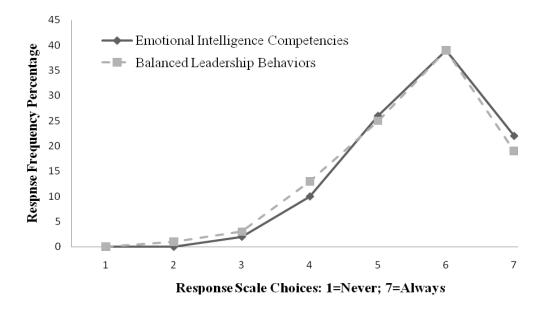


Figure 5. Comparison of response frequency percentages for emotional intelligence competency and balanced leadership behavior SECLB sections.

Research Questions

Research Question One

1. Is there a relationship between high school principals' perceptions of their emotional competencies, balanced leadership behaviors, and student achievement?

A determination of the degree and direction of a possible relationship between the two quantitative variables, (1) emotional competencies and (2) balanced leadership behaviors, suggested the application of Pearson r correlation techniques. Prior to each procedure, preliminary analyses were performed to ensure alignment with the basic assumptions of normality, linearity, and homogeneity of variance of the data as applicable.

The four emotional intelligence competency sub scores of Part One of the SECLB survey, (a) self-awareness, (b) social awareness, (c) relationship management, and (d) self-management, were balanced with their counterparts, the four relational balanced leadership behavior arena subscales, (a) interpersonal, (b) intrapersonal, (c) external context, and (d) organizational context, of Part Two of the SECLB survey. This analysis produced a total of 16 correlations. Relationships were measured first between individual subscales and then between overall scores of Part One and Part Two as illustrated in Table 11.

Table 11 Relationship of High School Principals' Self-Rated Emotional Intelligence Competencies to Balanced Leadership Behaviors

Indicators of Emotional	Balanced Leadership Behavior Arenas										
Intelligence			External	Organizational							
Competencies	Interpersonal	Intrapersonal	Context	Context	Overall						
Self-											
Awareness											
Pearson (r)	.448**	.499**	.393**	.433**	.540**						
Sig. p	.000	.000	.000	.000	.000						
r^2	20.070%	24.900%	15.444%	18.748%	29.160%						
Social											
Awareness											
Pearson (r)	.525**	.416**	.492**	.446**	.551**						
Sig. p	.000	.000	.000	.000	.000						
r^2	27.560%	17.305%	24.206%	19.891%	30.360%						
Relationship											
Management											
Pearson (r)	.752**	.737**	.647**	.683**	.823**						
Sig. p	.000	.000	.000	.000	.000						
r^2	56.550%	54.316%	41.860%	46.648%	67.732%						
Self-											
Management											
Pearson (r)	.433**	.580**	.468**	.415**	.562**						
Sig. p	.000	.000	.000	.000	.000						
r^2	18.740%	33.640%	21.902%	17.222%	31.584%						
Overall											
Pearson (r)	.673**	.677**	.608**	.602**	.757**						
Sig. p	.000	.000	.000	.000	.000						
r^2	45.292%	45.832%	36.966%	36.240%	57.304%						

** Significance p < .01, 2-tailed @ Significant Coefficient of Determination $r^2 > 25\%$ *Note*: Data listed in table represent SECLB survey results

Using correlation coefficients to categorize relationships between variables as weak (r <.5), moderately strong (8 < r > 5), and strong (r > 8), ten of the analyzed relationships between variables were weak with the remaining six rated as moderate. Relationships between variables and overall scale totals were all moderate with the exception of the relationship management subscale and the overall balanced leadership behavior factors which was strong (r = .823, p = .800, $r^2 = .67.732\%$).

The most closely related subscale items of the emotional intelligence competency portion of the SECLB survey were relationship management with balanced leadership behaviors within the interpersonal context (r = .752, p = >000, $r^2 = 56.550\%$). Relationship management within the intrapersonal context of balanced leadership behaviors was next (r = .737, p = >000, $r^2 = 54.316\%$) followed by relationship management in the organizational context (r = .683, p = >000, $r^2 = 46.648\%$) and relationship management in the external context (r = .647, p = >000, $r^2 = 41.860\%$).

In expanding the answer to research question one, the highest association of overall mean scores resulted between the relationship management competency and overall balanced leadership behavioral contexts. Noteworthy, as well, was the sustained correlational strength between the relationship management competency subscale and each of the balanced leadership behavior context subscales as noted in Table 11. A scatter plot was created to graphically represent the correlation between the two scales included in the SECLB. That chart is presented in Figure 6.

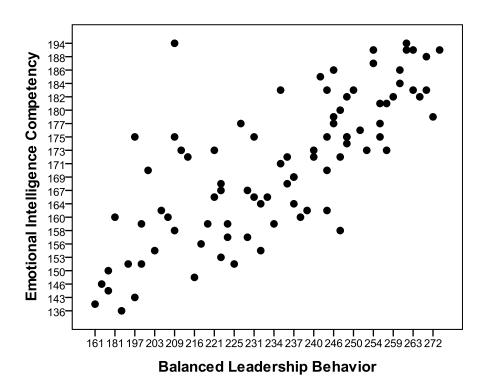


Figure 6. Scatter plot between emotional intelligence competency scale score and balanced leadership behavior scale score

Research Questions Two and Three

- 2. Is there a difference between the emotional intelligence profiles of high school principals in high achieving vs. low achieving schools?
- 3. Is there a difference between the balanced leadership behavior profiles of high school principals in high achieving vs. low achieving schools?

The McREL leadership study (2004) was the first to identify a substantial relationship between leadership and student achievement. The resulting balanced leadership framework (Marzano, Waters, & McNulty, 2003) identified 21 leadership responsibilities accompanied by 66 leadership behaviors that contributed to higher levels of student achievement. The framework represents a synthesis of effective leadership practices from a variety of theoretical perspectives (Bass and Avillio, 1990; Blake and Mouton, 1985; Bruffee, 1997; Fielder & Garcia, 1987;

Fielder, 1967; Fleishman, 1953; Fullan, 2001; George, 2004; Greenleaf, 2002; Hersey and Blanchard, 1977; Katz and Kahn, 1952; Kouzes & Posner, 2003; Leithwood and Duke, 1999; Schein 2004; Spillane, 1985).

A determination of the degree and direction of a possible relationship between the two quantitative variables, (a) emotional intelligence competency and (b) balanced leadership behaviors, and the categorical variable student achievement as a measure of leadership effectiveness was analyzed with the utilization of a *t*-test for independent groups.

The four emotional intelligence competency sub scores of Part One of the SECLB survey, (a) self-awareness, (b) social awareness, (c) relationship management, and (d) self-management, were analyzed independently for principals from schools demonstrating high levels of performance and for those principals from schools demonstrating low levels of student performance. Student performance levels were determined by results of the communication arts section of a state assessment given in the spring of each year (Missouri Department of Elementary and Secondary Education, 2007). This determination was explained further in Chapter Three.

Respondents were sorted into two groups with assigned numeric values for the purpose of data analysis using the Predictive Analytics SoftWare (PASW) Statistics 18 program. A value of one (1) was assigned to schools achieving at high levels while a value of two (2) was assigned to schools achieving at low levels. Presented in Table 12 below are the results of the statistical analysis by achievement level group with regard to emotional intelligence competency subscales.

Table 12
Summary Statistics of Emotional Intelligence Subscales by Achievement Level Group

Emotional Intelligence						
Competency				Mean	Std.	Sig.
Subscale	Ranking	N*	Mean	Difference	Deviation	(two-tailed)
Self-Awareness				.073		0.415
	high	54	5.915		.483	
	low	43	5.842		.369	
Social Awareness				.091		0.416
	high	54	5.650		.537	
	low	42	5.560		.548	
Relationship						
Management				011		0.93
C	high	53	5.540		.582	
	low	42	5.551		.569	
G 103.5				404		0.464
Self-Management				.104		0.461
	high	53	5.528		.610	
	low	43	5.424		.765	

^{*}Note: Cases with partially missing data were automatically excluded from the PASW Software.

The mean differences between principals of schools reporting high levels of student achievement and those principals from schools reporting low levels of student achievement by emotional intelligence competency subscales and based on a seven point response scale were as follows: (a) self-awareness, .073 with a 95% confidence interval from -.1040 to .2499, (b) social awareness, .0909 with a 95% confidence interval from -.1302 to .3121, (c) relationship management, -.01501 with a 95% confidence interval from -.246854 to .225852, and (d) self-management, .10388 with a 95% confidence interval from -.17460 to .38237.

Examination of p values for each of the subscales, (a) self-awareness p = .415, (b) social awareness, p = .416, (c) relationship management, p = .93, and (d) self-management, p = .461, supported the conclusion that there was no significant difference in perceived emotional intelligence competency profiles between the high achieving and low achieving principals. Of note is the nearly identical means for both achievement level groups on the relationship management subscale (p = .93, mean difference = -.01501).

A similar procedure was followed with the four relational balanced leadership behavior arena sub scores, (a) interpersonal, (b) intrapersonal, (c) external context, and (d) organizational context, of Part Two of the SECLB survey. Results of this analysis are presented in Table 13.

Table 13
Summary Statistics of Balanced Leadership Behavior Subscales by Achievement Level Group

Balanced Leadership				Mean	Std.	Sig.
Behavior				Mean	Siu.	Sig.
Context	Ranking	N*	Mean	Difference	Deviation	(two-tailed)
						,
Interpersonal				-0.05		0.710
	high	53	5.432		.670	
	low	42	5.473		.606	
Intrapersonal				-0.07		0.612
	high	54	5.429		.711	
	low	43	5.499		.615	
Organizational				-0.16		0.228
Context	high	54	5.622		.613	
	low	43	5.779		.656	
External				0.02		0.899
Context	high	53	5.614		.531	
	low	42	5.599		.686	

^{*}Note: Cases with partially missing data were automatically excluded from the *PASW* Software. Note: Data listed in table represent SECLB survey results

The mean differences between principals of schools reporting high levels of student achievement and those principals from schools reporting low levels of student achievement by balanced leadership behavior subscales and based on a seven point response scale were as follows: (a) interpersonal -0.05 with a 95% confidence interval from -.31 to .21, (b) intrapersonal, -0.07 with a 95% confidence interval from -.34 to .20, (c) organizational context, -0.16 with a 95% confidence interval from -.41 to .10, and (d) external context, .0.02 with a 95% confidence interval from -.23 to .26.

Examination of p values for each of the subscales, (a) interpersonal p = .710, (b) intrapersonal, p = .612, (c) organizational context, p = .228, and (d) external context, p = .899, supported the conclusion that there was no significant difference in balanced leadership behavior profiles between the high achieving and low achieving principals. Of note is the nearly identical means for both achievement level groups on the external context subscale (p = .90, mean difference = -.02).

A correlational analysis of the overall scores on the two scales that comprised Part One (emotional intelligence competency) and Part Two (balanced leadership behavior) of the SECLB produced similar results. Results of this analysis are illustrated in Table 14.

Table 14

Summary Statistics of Emotional Intelligence Competency and Balanced Leadership Behavior

Scales by Achievement Level Group

				Mean	Std.	Sig.
Scale	Ranking	N*	Mean	Difference	Deviation	(two-tailed)
Emotional						
Competency				2.00		0.471
	high	51	170.71		13.690	
	low	41	168.71		12.450	
Balanced						
Leadership						
Behavior				-1.58		0.756
	high	52	231.72		24.127	
	· ·	41	222.20		24.542	
	low	41	233.29		24.542	

^{*}Note: Cases with partially missing data were automatically excluded from the PASW Software.

Research Questions Four and Five

- 4. Is there a difference between the emotional intelligence profiles of female and male high school principals?
- 5. Is there a difference between the balanced leadership behavior profiles of female and male high school principals?

Research questions five and six were similar in nature to research questions three and four in that a determination of independent group profiles was required. Whereas the grouping for research questions three and four was based on school achievement levels as a measure of leadership effectiveness, consideration of research questions five and six suggested a slight modification in comparative data analysis. Data were analyzed to determine the degree and direction of a possible relationship between the two quantitative variables, emotional intelligence

competency and balanced leadership behaviors, and the categorical variable gender using a t-test for independent groups.

Respondents were sorted into two groups with assigned numeric values for the purpose of data analysis using the Predictive Analytics SoftWare (PASW) Statistics 18 program. A value of one (1) was assigned to female principals while a value of two (2) was assigned to male principals.

The four emotional intelligence competency sub scores of Part One of the SECLB survey, (a) self-awareness, (b) social awareness, (c) relationship management, and (d) self-management, were analyzed independently for female principals and for male principals. Also included in the analysis was the overall emotional intelligence competency scale score for both groups of principals. Presented in Table 15 are the results of the statistical analysis by gender with regard to emotional intelligence competency subscales and overall scale score.

Table 15
Summary Statistics of Emotional Intelligence Overall Scale Mean and Subscale Means by
Gender

Emotional						
Intelligence						
Competency				Mean	Std.	Sig.
Subscale	Gender	N*	Mean	Difference	Deviation	(two-tailed)
Self-Awareness				0.048		0.606
	female	62	5.892		0.446	
	male	34	5.844		0.409	
Social Awareness				0.304		0.007**
1 wareness	female	62	5.706	0.504	0.524	0.007
	male	33	5.402		0.499	
	marc	33	3.402		0.777	
Relationship						
Management				0.120		0.638
C	female	61	5.572		0.556	
	male	33	5.470		0.598	
Self-						
Management				0.070		0.461
	female	63	5.500		0.674	
	male	32	5.543		0.710	
Overall				4.796		0.094
	female	60	171.180		13.150	
	male	31	166.390		12.107	
	-				• ,	

^{*}Note: Cases with partially missing data were automatically excluded from the PASW Software

^{**} Significance p < .05

The mean differences between female and male principals by emotional intelligence competency subscales and based on a seven point response scale were as follows: (a) self-awareness, .048 with a 95% confidence interval from -.1357 to .2313, (b) social awareness, .30 with a 95% confidence interval from .0835 to .5247, (c) relationship management, .10 with a 95% confidence interval from -.1429 to .3469, and (d) self-management, .07 with a 95% confidence interval from -.2255 to .3661. The mean difference between female and male principals by overall emotional intelligence competency scale scores and based on a 210 point scale (30 items x 7 point response scale) was 4.8 with a 95% confidence interval from -.833 to 10.425.

Examination of p values for three of the subscales, (a) self-awareness p = .606, (b) relationship management, p = .638, and (c) self-management, p = .461, supported the conclusion that there was no significant difference in perceived emotional intelligence competency profiles between female and male principals in three of the four quadrants of emotional intelligence competency. There was, however, a significant (p = .007) difference between female and male principals in their perceptions of individual social awareness competency.

Similarly, the four relational balanced leadership behavior arena sub scores, (a) interpersonal, (b) intrapersonal, (c) external context, and (d) organizational context, of Part Two of the SECLB survey were analyzed independently for female principals and for male principals. Also included in the analysis was the overall balanced leadership behavior scale score for both groups of principals. Table 16 presents the results of the statistical analysis by gender with regard to balanced leadership behavior subscales and overall scale score.

Table 16
Summary Statistics of Balanced Leadership Behavior Overall Scale Mean and Subscale Means by Gender

Balanced Leadership				Mean	Std.	Sig.
Behavior						(two-
Context	Gender	N*	Mean	Difference	Deviation	tailed)
Interpersonal				0.322		0.019**
1	female	61	5.564		0.564	
	male	33	5.242		0.726	
Intrapersonal				0.013		0.927
1	female	62	5.468		0.717	
	male	34	5.455		0.587	
Organizational				0.161		0.237
Context	female	62	5.755		0.609	
	male	34	5.594		0.675	
External				0.216		0.092
Context	female	60	5.605	0.210	0.557	0.072
Context	male	34	5.479		0.648	
Overall				7.318		0.165
Overan	female	59	235.288	7.510	23.159	0.105
	male	33	227.970		25.645	

^{*}Note: Cases with partially missing data were automatically excluded from the PASW Software.

^{**} Significance p < .05

The mean differences between female and male principals by balanced leadership behavior subscales and based on a seven point response scale were as follows: (a) interpersonal .322 with a 95% confidence interval from .054 to .059, (b) intrapersonal, 0.013 with a 95% confidence interval from -.27 to .30, (c) organizational context, 0.161 with a 95% confidence interval from -.11 to .43, and (c) external context, .0.22 with a 95% confidence interval from -.036 to .468. The mean difference between female and male principals by overall balanced leadership behavior scale scores and based on a 294 point scale (42 items x 7 point response scale) was 7.4 with a 95% confidence interval from -3.08 to 17.71.

Examination of p values for three of the balanced leadership behavior subscales, (a) intrapersonal, p = .927, (b) organizational context, p = .237, and (c) external context, p = .092, supported the conclusion that there was no significant difference in balanced leadership behavior profiles between female and male principals within the intrapersonal, organizational or external contexts. There was, however, a significant (p = .019) difference between female and male principals in their balanced leadership behaviors within the interpersonal context. Of note is the nearly identical means for both gender groups on the intrapersonal subscale (p = .927, mean difference = -.013).

Research Question Six

6. Does a profile exist combining gender, emotional intelligence competency, and balanced leadership behavior that is related to effective leadership?

For the purpose of addressing research question six, respondents were divided into four groups representing four possible combinations of independent (categorical) variables.

Numerical values were assigned to each group for the purpose of statistical analysis: one (1) female principals from high performing schools, two (2) female principals from low performing

schools, three (3) male principals from high performing schools, and four (4) male principals from low performing schools.

A one-way analysis of variance was performed on the eight subscales of the SECLB survey as well as the overall scale scores from each section of the SECLB survey and the gender/achievement groups to determine the existence of any combined-group profiles.

A comparison of mean values between the overall scale scores for emotional intelligence competencies and balanced leadership behaviors produced no significant differences. A graphic representation of the relationship between the gender/achievement group mean scores for each of the two scales did produce differing patterns. Mean scores for both male groupings were lower for each of the scales. In addition, mean scores on the balanced leadership behavior scales for male principals from low achieving schools were higher than those of male principals from high achieving schools. This pattern was repeated in the two female principal groupings. These patterns are illustrated in Figure 7.

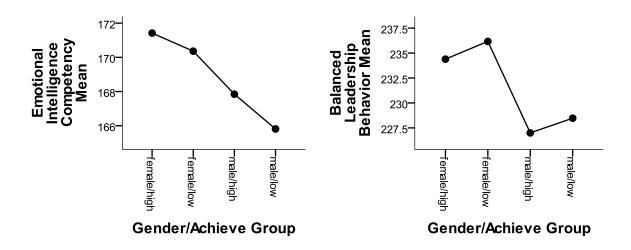


Figure 7. A comparison of scale mean scores by gender/achievement groupings.

Mean scores were figured for each group and compared within the context of each scale. The mean difference between groups was significant at the .05 level. An α level of .05 was used to determine the critical value of 'between groups' statistical difference. Significance was found in the social awareness subscale ($p = .04 < \alpha$). A comparison of the levels of significance for overall scale scores and subscale scores is presented in Table 17.

Table 17 Comparison of Overall Scale and Subscale Significance between Gender/Achievement Groupings

		Sig.
Scale	Subscale	(between groups)
Emotional Intelligence Competency (overall)		0.50
	Self-Awareness	0.82
	Social awareness	0.04**
	Relationship Management	0.75
S	elf-Management	0.85
Balanced Leadership Behavior (overall)		0.60
	Interpersonal	0.13
	Intrapersonal	0.97
Organ	izational Context	0.49
	External Context	0.32

**Significance p < .05 = α Note: Data listed in table represent SECLB survey results

The emergence of only one area of significance in the comparison of gender/achievement groups does not support the existence of a profile combining gender, emotional intelligence competency, and balanced leadership behaviors that is related to effective leadership. In an effort to gain more insight into pattern relationships between the quantitative variables and the gender/achievement groups, the researcher created a series of scatter plot graphs to visualize any relational patterns.

Illustrated in Figure 8 are the patterns of relationship between emotional intelligence competency scale scores and balanced leadership behavior scale scores for all of the respondents. Lines designating mean values of each of the scales were added to the graphs to create reference points for gender/achievement group comparisons included in Figure 9.

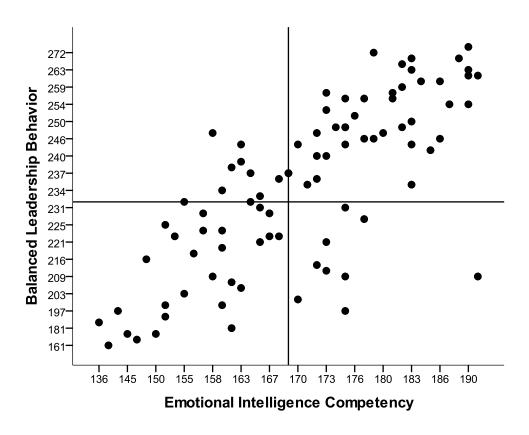


Figure 8. A comparison of mean scale scores for all respondents.

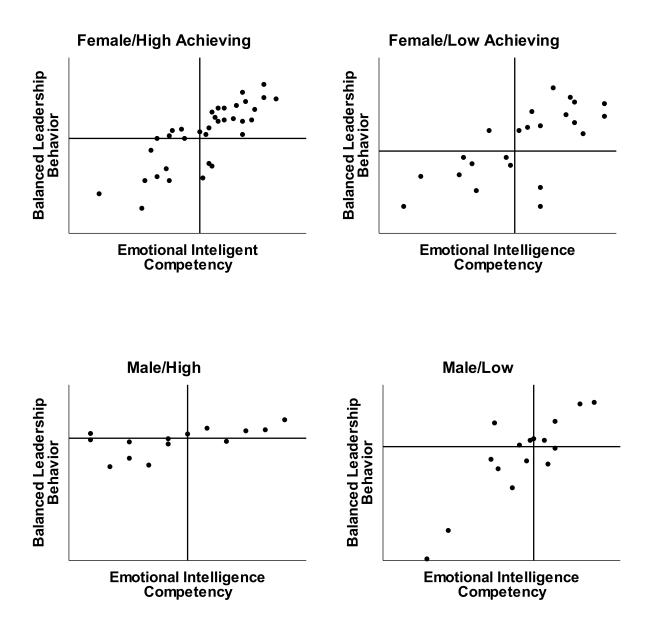


Figure 9. A comparison of mean scale scores by gender/achievement groupings.

The graphic representation of all respondent scores seems to indicate a positive relationship between the two scale variables. Statistical analysis supports a medium strength correlation between the two scores (p = .757, $r^2 = 57\% > 25\%$). The same general relationship is suggested by three of the four gender/achievement graphs, (a) female/high achieving, (b) female/low achieving, and (c) male/low achieving. The male/high achieving graph represents more of a flat, linear trend.

Overall, no specific profile emerged relating the combination of gender, emotional intelligence competency and balanced leadership behaviors statistically to effective leadership. Any relational patterns among these factors and leadership effectiveness can only be determined in terms of general trends. Of note, however, is the significance of the relationship between the social awareness subscale scores and gender/achievement grouping differences. This relationship supports the previous findings regarding the significance of social awareness subscale relationships.

Summary

The purpose of this study was to explore the differences in emotional intelligence competency levels as related to balanced leadership responsibilities and leadership effectiveness. Presented in Chapter Four was a summary of the data collected by the researcher to support the study. Demographic data were collected from survey respondents. Respondent school achievement data were collected from published state report cards (Missouri Department of Elementary and Secondary Education, 2007).

Gender and school achievement levels served as independent categorical variables utilized for grouping purposes. Data collected with the SECLB survey instrument provided dependent quantitative variables in the form of individual item responses, subscale scores, and overall scale scores. Various correlational techniques and analysis of variance were used to answer research questions.

According to statistical procedures, positive Pearson r relationships were revealed between indicators of emotional intelligence competency and balanced leadership behaviors. Subscales in parts one and two of the SECLB survey correlated with a 95% level of confidence

(p < .05) and yielded significant $(r^2 > 25\%)$ coefficients of determination indicating mutual predictability.

Analysis of variance compared and contrasted principal responses by school achievement level and gender. No significant differences existed between scores of principals from high achieving schools and those from low achieving schools on either scale or any of the subscales. Only one significant (p = .007) difference emerged between female and male principals. This difference was in the social awareness subscale of the emotional intelligence competency scale. The significance of this difference was supported in an analysis of variance between four groupings that resulted from the intermixing of the two categorical variables (gender and achievement level). Once again, the only significant ($p = .04 < \alpha = .05$) difference between groups was in the social awareness subscale scores.

In the final chapter, the researcher highlights an interpretation and discussion of the findings pertaining to the problem described in Chapter One and the literature review provided in Chapter Two. The limitations of the study and implications for practice is also be addressed. A final section suggesting topics for further research will close the chapter.

CHAPTER FIVE

Summary, Implications, and Recommendations

Introduction

The relationships between emotional intelligence competencies, balanced leadership behaviors, and leadership effectiveness were examined in this study. This chapter includes a summary of the study including the purpose of the study and the design and procedures utilized for data collection followed by a discussion of the findings and limitations of the study. Finally, the researcher for consideration presents a discussion of the implications for practice and recommendations for further research.

Summary of the Study

Purpose

Increased accountability resulting from federal as well as state legislative mandates have created challenging opportunities for today's educational leaders (Kouzes & Posner, 2007). The purpose of this study was to explore the connection of emotional intelligence competency to effective leadership behaviors within the context of student achievement. Although there have been many studies conducted on behaviors related to effective leadership, as well as studies on emotional intelligence, the interconnectedness between displayed leadership behaviors and emotionally intelligent leadership competency in high and low performing schools has not been directly addressed.

Theoretical and Conceptual Underpinnings

Antonakis, Cianciolo, and Sternberg (2004) stated "100 years of leadership research has led to several paradigm shifts and a voluminous body of knowledge." (p. 4). Definitions of

leadership effectiveness are as elusive as definitions of leadership (Bolman & Deal, 1997; Yukl, 2006). Yukl (2006) stated "it is difficult to evaluate the effectiveness of a leader when there are so many alternative measures of effectiveness, it is not clear which measure is most relevant" (p. 9). Within the field of public education, student achievement serves as a critical gauge of leader efficiency (SEDL, n.d.). Leadership, though not a true domain of emotional intelligence, requires emotion-based skills to facilitate effective leadership practice (Webb, 2004).

The review of literature presented in Chapter Two provided the foundational constructs of this study. Four theoretical constructs were examined through the lens of behaviors and practices: leadership theory, leadership effectiveness, emotional intelligence theory and the measurement of emotional competencies. Appendix F categorizes the relevant literature citations of that review in relation to the four constructs identified for this study.

It was the intent of this study to compare emotional competencies as described in emotional intelligence research (Bar-On, 1997; Caruso, 2006; Goleman, 1995; Mayer et.al, 1999; & Schutte, 2001) and balanced leadership competencies as described by Marzano, Waters, and McNulty (2003) in relation to leadership effectiveness as defined by student achievement levels. Locating an instrument that would adequately measure the correlates of both sets of competencies listed above was problematic. Therefore, the researcher created a survey. *Method*

The literature review provided the foundation to develop the survey "Self-Assessment of Emotion-based Competencies and Leadership Behaviors" (SECLB) (Appendix A). The SECLB was field tested utilizing test-retest reliability. Test-retest scores were correlated using the Pearson product-moment correlation coefficient (r) to establish the reliability. Survey items were sorted into subscales for analysis (Appendix E). Collection and analysis of SECLB data in

relation to student achievement data represented phase one (qualitative) of a two-phase mixed design (Tashakorri & Teddlie, 1998). Phase two (qualitative) consisted of interview and focus-group data collected, transcribed, coded (Appendix H), and analyzed in relation to phase one quantitative for the purpose of triangulation and descriptive depth.

The sample population was comprised of 98 Missouri public high school principals representing the ten percent and bottom ten percent of achievement ranking as measured by the Missouri state assessment communication arts instrument. 64% (n=63) of the sample population were female and 36% (n-35) were male. 56% (n=55) represented the top ten percent of high school performance rankings while 44% (n=43) represented the bottom ten percent ranking. Interview data was collected from three principals representing high performing districts and two principals representing low performing districts. One focus group was conducted in a high performing school and one in a low performing school. Data collection procedures were explained in Chapter Three. Protocols for data collection are included in appendixes C and D.

A secondary participatory population was made up of a total of 37 teachers and support staff that participated in focus group discussions. Focus group one (FG1) was held at a high achieving school and focus group two (FG2) was held at a low achieving high school. A demographic analysis of each of the focus groups is documented in Appendix G. Qualitative data was used in Chapter Five to enhance the discussion of the quantitative data analysis presented in Chapter 4.

Limitations of the Study

"There is nothing mysterious about combining quantitative and qualitative measures, this is, in fact, a form of triangulation that enhances the validity and reliability of one's study" (Kidder and Fine ,1987, p. 72). The use of a mixed design may be considered by some a

limitation. Inherent restrictions connected with both quantitative and qualitative design and method may result in contradictory findings when the two data collections are synthesized into one analysis. It is for this reason that this researcher chose the enhancement (Tashakorri & Teddlie, 1998) approach to the combining of quantitative and qualitative data for this study. While quantitative data was analyzed using proven statistical methods in Chapter Four, qualitative data will be included in the discussion that follows to enhance and enrich the quantitative findings.

All efforts were made to standardize qualitative data collection. Five principals were interviewed, three from high achieving schools, and two from low achieving schools. Of the five interviewed, three were female and two male. Both of these determinations were based on the demographic make-up of the sample population. Questions for each principal interview were identical (Appendix D). Focus group discussions were conducted in one high achieving (female principal) and one low achieving district (male principal). Focus group discussion prompts were also identical (Appendix C).

In reference to the sample population, more high achieving schools were represented than low achieving schools. In addition, there were more female respondents than male. As illustrated in Chapter Four, 39% of the respondents were female principals from high achieving schools, while only 17% were male principals from high achieving schools. This two to one disparity might serve to limit the generalizability of findings because the respondents may differ from non-responding principals.

One of the initial assumptions made by the researcher was that respondents would be honest in their responses. Not doubting the honesty of any of the respondents, principals may have responded based on their ideas of what the 'right' answer should be according to their presumed knowledge of the variables being addressed.

Other limitations included: (a) little was known about quantified results of principal interactions with students; (b) student perceptions with regard to the role and behavior of the principal in their school were not included in the study; (c) parents' perceptions of the role of the principal with regard to the achievement of their children were not explored; and (d) student achievement considerations within a single content area and a single assessment limits the scope of efficacy determination within the complexity of a high school setting. Finally, the correlational statistical approach taken by the researcher was meant to show association, not causation. Thus, the results of this study should be generalized with caution.

Conclusions

The existence of significant relationships between a leader's emotional intelligence and leadership behavior has been found in corporate organizational literature (Cooper & Sawaf, 1997; Goleman, et al, 2002). This hypothesis was proven to be true among the principal respondents in this study. A significant connection with student achievement, however, was not shown among the sample population.

Whereas, corporate organizational research has shown leadership emotional intelligence has a positive effect on organizational productivity (Cooper & Sawaf, 1997; Goleman, et al, 2002), the equating of 'productivity' with 'student achievement' in educational research has proved to be a daunting task. This is due to the myriad of factors beyond the control of the 'production workers' that influence student performance. Among these factors are student demographics, classroom environment, and teacher characteristics (Public Policy Institute of California, 2003). It falls to the leader to deal with all of these in an effective manner. This is a task well-beyond

the scope of one test score. This leadership task is dependent upon the degree of emotional competency exhibited in interactions with stakeholders both within the organization as well as those in the community (Goleman et al, 2002; Fullan, 2001).

One of the important factors in effective leadership is the alignment of perceptual reality between leader and follower (Davis, 2003; Fullan, 2005; George, 2004). When ranked by overall mean scores the respondents' strongest scores were in the area of self-awareness (5.88) followed by social awareness (5.61), relationship management (5.54), and self-management. The placement of relationship management as third out of a list of four was supported by principal interviews.

The principal (PL1) from the low achieving school stated that his relationship with staff members was "pretty good minus the three or four people that are struggling with believing that all students can learn" (IPL1, 4, 105). Comments in the follow-up focus group (FG2) added depth to the meaning of what the principal termed "pretty good." One participant stated "even though he [the principal] can be seen a lot in the halls and in our classrooms, he seems out of touch with some of the issues and frustration that we are facing as classroom teachers" (FG2, 7, 152). Another participant in the same group followed with "I feel my principal is in a job that he doesn't like very well and that affects his leadership and attention to duty" (FG2, 8, 181).

The other interviewed principal from a low achieving school made similar remarks regarding her relationship with staff members. She (PL2) stated "I get along pretty good with all of the teachers until I make a decision they don't like, especially about a student they [teacher] sent to the office. That's when the whispering starts in the hallways and the teachers' workroom" (IPL2, 2, 29).

The comments reported previously also serve to enhance the significant differences in social awareness this study revealed. This difference seemed more a result of gender rather than student achievement. Overall, female principals scored higher on the social awareness scales than did males ($p \le .01$). In describing a female principal (PH1) in a high achieving school, a teacher (FG1) explained

"...accessible, does not micromanage. [She] hires teachers to do the job needed and lets them do it. Supportive. Direct with her expectations and lets you know where you need to improve. Willing to put resources into extra training if needed. Personal, professional, caring, supportive, cognitively aware, and sensitive in all areas." (FG1, 32, 681)

This statement supported a statement made by the building principal (PH1) when she was interviewed. She said

"The previous experience [assistant principal in another district] let me jump into dealing with discipline non-stop. I never had an opportunity to get into the classroom. I think it made me appreciate having a school that truly believes in relationships being the key to success at school." (IPH1, 05, 92)

The conceptual underpinning of social awareness and relationship management in relation to effective intrapersonal leader/follower interactions is empathy. E. Scott Geller, Ph.D. of Virginia University (2000) described empathic leadership "leaders need to take time to understand another person's perspective before giving direction, advice, or support. In other words, leaders need to listen with empathy and then lead with empathy" (p.1). Some of the cautions that Geller puts forth about this emotional intelligence-based leadership style are highlighted by the comments posted.

"Obviously, empathic leadership is not easy. It is not an efficient, quick-fix process. It takes extra time, along with special competence and commitment. Is it worth the effort? Well, consider the benefits of giving people the kind of leadership they need. And consider the sub-optimal performance that can result from insulting people with oversupervision or from confusing people with under-supervision. (Geller, 2000, p.8).

It is this empathic aspect of leadership that provides the depth of understanding to balanced leadership behaviors necessary for strength of relationships based in shared ownership and responsibility. These are the relationships required for complex change. Fullan (2010) stated "Learn to combine love, trustworthiness, and empathic but firm handling of resistance, and you will be rewarded by the speed of change. Complex becomes simply powerful" (p. 73).

Handling resistance and conflict are an integral part of the relationships required for complex change (Fullan, 2010). This concept was supported in the interview data when principals were asked how they (principals) handle conflict among staff members. PL2 stated "I don't become directly involved. I just tell the feuding parties to work it out between themselves. I don't have the time to waste on petty squabbles" (IPL2, 6,137). The same sentiment was expressed by participants in FG2, "I'm not sure that there has been an instance of conflict, but I would imagine that if there was one, my principal would be hands-off" (FG2, 4, 83).

In contrast, PH3 described her style "I deal directly with conflict among staff members if it is affecting them. I usually have staff members come in and we use conflict resolution to solve problems" (IPH3, 10, 225). Similarly, a participant in FG1 stated "She is willing to listen to both sides of the issue. Prefers to be proactive not reactive" (FG1, 5, 110). Comparison of the themes and commonality of thought between principals and teachers in high and low achieving schools added additional dimensions to the quantitative findings that need to be considered when

determining the differences between the two levels of schools and leadership. Despite the apparent lack of statistical differences, examination of follow-up qualitative data reveals some potential areas of difference and may serve as a starting point for follow-up studies.

Implications

"The capacity to be an effective principal in an increasingly complex and changing societal context requires understanding and skills beyond the preparation and in-service development of most principals" (Fullan, 2007, p.168). The identification of a relationship between emotional intelligence and effective leadership as presented in this study suggests the inclusion of emotional intelligence competence in administrative training and preparation.

The role of emotional intelligence in relationship to effective leadership and student achievement was represented in graphic form by Thomas G. Reed (2005) (Figure 10). Reed's model reflects the complexity of relationships between emotional intelligence, principal leadership, and student achievement. The model was grounded in theoretical constructs that paralleled the constructs of this study and, similarly, direct causal relationships proved difficult to ascertain. This was due, in part, to the number and degree of variables included.

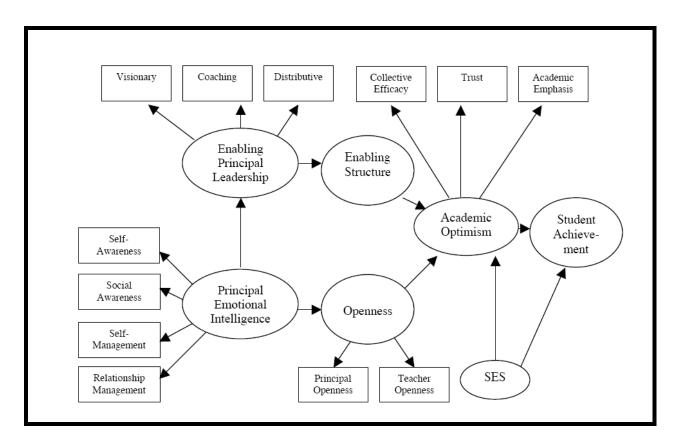


Figure 10: Reed's Proposed Structural Equation Model

Reed (2005) stated "a dynamic combination of emotional intelligence competencies informs cognition and guides leadership behavior "(p.162). Reed continued

"Effective leaders influence, inspire, initiate, communicate, create, adapt, achieve, empathize, support, and serve. They are highly self-confident and optimistic individuals, who possess acute organizational awareness and political adeptness. All of these represent emotional intelligence competencies that guide leadership behavior, and all can be developed over time through accurate self-assessment, reflection, and experience" (p. 162).

The foundational nature of relationship building and management to sustainable change and continuous improvement (Fullan, 2010) suggested the inclusion of the soft people skills to leadership training protocols. It is no longer enough to know how to behave as a leader. The

strength of 21st century leadership comes from understanding the when, how, and why not just in regard to various contextual situations, but also with regard to the human resources that play pivotal roles in accomplishing tasks and realizing goals (Marzano, Waters, & McNulty, 2003).

It is the emotional intelligence construct, as represented in Reed's (2005) model that informs and supports the effectiveness and enabling function of balanced leadership (Reed, 2005). It follows that understanding and developing emotional intelligence competencies in relationship to effective leadership practices would be essential components of any comprehensive professional development plan for school leaders.

Once balanced leadership behaviors have been identified and supported with emotional competence, the task of effective leadership expands to creating the organizational structures that enable and support efficacious behavior by all organizational stakeholders (Fullan, 2010; Meadows, 2008). This enhancement of the leadership role beyond the enabling aspect of balanced leadership results in what Michael Fullan (2010) labeled motion leadership. Motion leadership as the ability to initiate and sustain positive forward motion by individuals, institutions, and whole systems (Fullan, 2010). Foundational to motion leadership are relationships. Fullan (2010) stated "leaders must develop relationships first to a degree before they can push challenges" (p.19). The complexity of these interactions suggests the addition of systems theory and a systems approach to change leadership.

Recommendations for Further Research

As stated earlier, this study and its findings, both quantitative and qualitative, should be viewed as a starting point for more extensive research related to principal emotional intelligence and leadership behaviors. Suggestions regarding the extent and design of such examinations follow:

- 1. Future qualitative and quantitative research using the variables of this study to validate and further the findings of this study.
- 2. An in-depth comparative case study approach to two schools, one low achieving and one high achieving focusing of leadership style and behaviors
- 3. There is a need for a body of research that ascertains the effect of social-emotional leadership training on principal effectiveness.
- 4. What is the relationship of self-reported emotional competency and balanced leadership profiles to day-to-day functioning in "real time"?
- Factors affecting student achievement should be examined more closely under a more inclusive protocol that involves staff, students, parents, and the local community as stakeholders.
- 6. Obtaining students' perspectives may be beneficial for school principals to better align programming with student needs as opposed to teacher perceptual assumptions.

Concluding Overview

The purpose of this study was to examine the relationship of emotional intelligence competencies to balanced leadership behaviors as reported by high school principals in both high and low performing schools. Statistical measures of relationship and comparison were used to answer research questions. Qualitative data collected by means of principal interviews and teacher focus groups were used as a follow-up to quantitative data collection and analysis. The purpose of qualitative data collection was to enhance the quantitative findings. Significant relationships were found between emotional intelligence competency and balanced leadership behaviors. Although quantitative analysis failed to highlight differences in emotional intelligence

competency and balanced leadership behaviors with regard to achievement levels, some differences emerged between high and low achieving districts as qualitative data was analyzed.

The primary finding informed that both emotional intelligence competency, based on the four components of emotional intelligence (a) self-awareness, (b) social awareness, (c) relationship management, and (d) self-management, and balanced leadership behaviors held a strong positive relationship with a high coefficient of mutual predictability. No significant relationship, however, was found between these components and achievement levels as measured by state test scores in the area of communication arts. Although no significant differences emerged in these overall emotional intelligence competencies and balanced leadership behaviors between male and female principals, there was a significant difference in the area of social awareness with female principals earning significantly higher scores than male principals.

Research results indicate the need for further training and development in social awareness and relationship management among high school principals." Emotional intelligence abilities can be cultivated and strengthened and leadership abilities are learnable; the process is not easy; it takes time, and most of all commitments; but the benefits that follow, make it not only worthwhile but invigorating." (Goleman, et al. 2002, p.88).

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Appendix A

Survey Instrument

- Self Assessment of Emotion-Based Competencies and Leadership Behaviors (SECLB)
 - a. Part I: Self-Assessment of Emotion-Based Competencies
 - b. Part II: Self-Assessment of Leadership Behaviors
 - c. Demographics
- 2. Pilot Study Protocol

SELF-ASSESSMENT OF EMOTION-BASED COMPETENCIES AND LEADERSHIP BEHAVIORS (SECLB)

Part I: Self-Assessment of Emotion-Based Competencies

This section of the survey consists of 30 behavior descriptors that refer to emotion-based characteristics. On a scale of 1 to 7, with 1 indicating that you NEVER behave as described and a 7 indicating that you ALWAYS behave as described, circle a rating that describes your personal emotion-based disposition and behavior.

		Never			Sometimes			Always
1	I readily adjust to changing situations.	1	2	3	4	5	6	7
2	I am aware of my personal strengths.	1	2	3	4	5	6	7
3	I recognize the existence of social networks within my school.	1	2	3	4	5	6	7
4	I am able to effectively resolve disagreements among staff.	1	2	3	4	5	6	7
5	I am trustworthy.	1	2	3	4	5	6	7
6	I use intuitive feelings to guide my decisions.	1	2	3	4	5	6	7
7	I use a compelling vision to guide and motivate staff.	1	2	3	4	5	6	7
8	I am able to read my own emotions.	1	2	3	4	5	6	7
9	I am comfortable leading change resulting in movement in a new direction.	1	2	3	4	5	6	7
10	I am adept at accurately sensing the emotions of others.	1	2	3	4	5	6	7
11	I am able to keep my own disruptive emotions and impulses under control.	1	2	3	4	5	6	7
12	I am willing to seize opportunities and act.	1	2	3	4	5	6	7
13	I am motivated by inner standards of excellence to improve personal performance.	1	2	3	4	5	6	7
14	I am able to recognize the needs of my staff.	1	2	3	4	5	6	7
15	I seek out the positive in any situation.	1	2	3	4	5	6	7
16	I am willing to advocate for change in the face of opposition.	1	2	3	4	5	6	7
17	I am adept at overcoming obstacles.	1	2	3	4	5	6	7

		Never			Sometimes			Always
18	I support the efforts of others through feedback and guidance.	1	2	3	4	5	6	7
19	I actively seek to understand perspectives different than my own.	1	2	3	4	5	6	7
20	I support staff collaboration and teamwork.	1	2	3	4	5	6	7
21	I possess a wide range of tactics for persuasion.	1	2	3	4	5	6	7
22	I possess a strong sense of personal self-worth.	1	2	3	4	5	6	7
23	I take an active interest in the concerns of others.	1	2	3	4	5	6	7
24	I display honesty and integrity.	1	2	3	4	5	6	7
25	Meeting the needs of my staff is a priority.	1	2	3	4	5	6	7
26	I recognize the political forces at work in my school.	1	2	3	4	5	6	7
27	I recognize the impact of my emotions on my patterns of behavior.	1	2	3	4	5	6	7
28	I am aware of my personal limitations.	1	2	3	4	5	6	7
29	I am willing to act as a change catalyst.	1	2	3	4	5	6	7
30	I am capable of excellence as a leader.	1	2	3	4	5	6	7

Part II: Self-Assessment of Leadership Behaviors

This section of the survey consists of 42 behavior descriptors that refer to leadership-based characteristics. On a scale of 1 to 7, with 1 indicating that you NEVER behave as described and a 7 indicating that you ALWAYS behave as described, circle a rating that describes your personal leadership-based disposition and behavior.

1	My behaviors are consistent with my beliefs about schools, teaching, and learning.	1	2	3	4	5	6	7
2	I am a strong advocate of the school and staff with the parents.	1	2	3	4	5	6	7
3	Staff members are aware of my beliefs about schools, teaching, and learning.	1	2	3	4	5	6	7
4	I am aware of the personal needs of individual staff members.	1	2	3	4	5	6	7
5	I actively support systematic dialogue regarding current research on effective schooling.	1	2	3	4	5	6	7

		Never			Sometimes			Always
6	I initiate activities and practices that expose staff to current research effective schooling.	1	2	3	4	5	6	7
7	I modify my leadership style to adapt to different situations.	1	2	3	4	5	6	7
8	I am willing to lead change initiatives with uncertain outcomes.	1	2	3	4	5	6	7
9	I systematically consider new and better ways of doing things.	1	2	3	4	5	6	7
10	I make systematic and frequent visits to classrooms.	1	2	3	4	5	6	7
11	I am a strong advocate of the school and staff with central office.	1	2	3	4	5	6	7
12	I exercise both directive and nondirective leadership behaviors as the situation warrants.	1	2	3	4	5	6	7
13	I am easily accessible to staff.	1	2	3	4	5	6	7
14	I systematically provide opportunities for staff input on all important decisions.	1	2	3	4	5	6	7
15	I work to maintain an awareness of issues in the school that have not surfaced but could create discord.	1	2	3	4	5	6	7
16	I systematically and fairly recognize the failures of the school as a whole.	1	2	3	4	5	6	7
17	I regularly engage in activities to keep informed about current research and theory on effective schooling.	1	2	3	4	5	6	7
18	I maintain personal relationships with staff members.	1	2	3	4	5	6	7
19	I am able to accurately predict what could go wrong from day to day.	1	2	3	4	5	6	7
20	I systematically promote a sense of well-being among staff.	1	2	3	4	5	6	7
21	I continually keep attention focused on established goals.	1	2	3	4	5	6	7
22	Leadership teams play a role in decision-making at our school.	1	2	3	4	5	6	7
23	I consistently attempt to operate at the edge versus the center of the school's competence.	1	2	3	4	5	6	7
24	I support performance versus seniority as a primary criterion for staff rewards and recognition.	1	2	3	4	5	6	7
25	I encourage teachers staff members to accomplish things that they perceive to be beyond their grasp.	1	2	3	4	5	6	7

		Never			Sometimes			Always
26	I work to maintain an awareness of informal groups and relationships among staff members.	1	2	3	4	5	6	7
27	I systematically and fairly recognize and celebrate the accomplishments of teachers.	1	2	3	4	5	6	7
28	I am comfortable with making major changes in how things are done.	1	2	3	4	5	6	7
29	I am the driving force behind major initiatives.	1	2	3	4	5	6	7
30	I regularly acknowledge significant events in the lives of staff members.	1	2	3	4	5	6	7
31	I systematically promote and support an understanding of purpose among staff.	1	2	3	4	5	6	7
32	I remain informed about significant personal issues within the lives of staff members.	1	2	3	4	5	6	7
33	I systematically promote cohesion among staff.	1	2	3	4	5	6	7
34	I have supported and maintained effective means for communication among staff members.	1	2	3	4	5	6	7
35	I provide conceptual guidance to staff regarding effective classroom practices.	1	2	3	4	5	6	7
36	I consider hard work and results as the basis for staff rewards and recognitions.	1	2	3	4	5	6	7
37	I systematically promote and support a shared vision among staff of what the school could be like.	1	2	3	4	5	6	7
38	I maintain open and effective lines of communication with staff.	1	2	3	4	5	6	7
39	I consciously challenge the status quo	1	2	3	4	5	6	7
40	I am a strong advocate of the school and staff with the community at large.	1	2	3	4	5	6	7
41	I consistently model a positive attitude about the ability of staff to accomplish substantial things.	1	2	3	4	5	6	7
42	I encourage others to express diverse opinions.	1	2	3	4	5	6	7

DEMOGRAPHICS: (Please check all that apply)
Gender: Male Female
Ethnicity: ☐ White (Non-Hispanic) ☐ Black (Non-Hispanic) ☐ Hispanic
☐ Native American ☐ Asian/Pacific Islander ☐ Other
Education : □ Bachelor's □ Master's □ Specialist's □ Doctorate
Total Years of Principal Experience
Years in Present Position
Total Years of Experience in Education
Age (optional)
Thank you for your participation – Optional: Write comments or feedback about this survey. (<i>Please use additional sheet if necessary</i>)
Thank you for completing the Self –Assessment of Emotion-Based Competencies and Leadership Behaviors.
Your participation in this study is appreciated.
Remember, your identity and your building's identity will remain confidential and anonymous in
the reporting of the results of this survey.

Pilot Study Protocol

Referent to the Survey "Self-Assessment of Emotion-Based Competencies and Leadership Behaviors (SECLB)"

This survey was developed as part of a research project examining the relationship of levels of emotional intelligence to balanced leadership responsibilities and leadership effectiveness in high school principals.

Your willingness to participate in a pilot study for this survey instrument and provide some feedback on your understanding and perception of the survey items is greatly appreciated. Your individual responses in the pilot test phase are not going to be recorded or reported to anyone except the researcher who designed the survey.

Please complete the survey and record any general comments or other suggestions for revision to improve the instrument. After completing the survey with general comments, please answer the questions below. (Use the back of this page and/or additional pages if necessary.)

estions below. (Use the back of this page and/or additional pages if necessary.)
1. Is the layout and general appearance of the survey satisfactory?
2. Are the instructions clear?
3. Are there any items that were difficult to understand?
4. Are there any items that should be deleted? Why?
5. Are there any items that should be added to the survey? Why?

Appendix B

Informed Consent

- 1. Informed Consent Permission from District Administrator
- 2. Informed Consent Form Building Principal
 - a. Follow-up Letter
 - b. Thank-You Letter
- 3. Informed Consent Form Teacher Focus Group Participation

District Administrative Permission for School Participation Letter

< Name of District>

Dear <Title> <First Name> <Last Name>

I would like to request your permission to invite < *Name of School* > to participate in a research study entitled, An Examination of the Relationship of Emotional Intelligence Levels to Balanced Leadership Responsibilities and Leadership EFFECTIVENESSs in High School Principals. I am examining the leadership practices that lend themselves to increases in student achievement. The focus of this study is on principal behaviors and actions based in both emotional competence and administrative EFFECTIVENESSs. This study is part of my dissertation research for a doctoral degree in Educational Leadership and Policy Analysis from the University of Missouri-Columbia. The research gathered should be helpful in providing insight into high school leadership EFFECTIVENESSs and school improvement.

For the study, a sampling of Missouri high schools was selected. I am seeking your permission as the administrator of the < Name of District > School District to contact the principal and the teaching staff of the < Name of School > school building for the purpose of inviting the principal and teaching staff to participate in this study. The principal of < Name of School > high school will be asked to complete a 20-minute Self -Assessment of Emotion-Based Competencies and Leadership Behaviors survey. All of the teachers from the <Name Here> school building will be invited and 5-7 randomly chosen to participate in a focus group interview session. A copy of the survey, focus group protocol and informed consent letters are attached for your review.

Participation in the study is completely voluntary. The participants may withdraw from participation at any time they wish without penalty, including in the middle of or after completion of the survey and/or interview. Participants' answers and the building's identity will remain confidential, anonymous, and separate from any identifying information. I will not list any names of participants, or their corresponding institutions, in my dissertation or any future publications of this study.

Please do not hesitate to contact me with any questions or concerns about participation either by phone at (417) 527-1833, or by fax at (417) 829-5072, or by email at scutbirth@missouristate.edu. In addition, you are also welcome to contact the dissertation advisor for this research study, Dr. Barbara Martin, who can be reached at 660-543-8823 or by email at bmartin@cmsu.edu.

If you choose to allow me to contact <*Name Here*> school building regarding participation in this study, please complete the attached permission form. A copy of this letter and your written consent should be retained by you for future reference.

Thank you for your time and consideration.

Suzanne Cutbirth Doctoral Candidate

District Administrative Permission for School Participation Form

I, grant permission for building to be contacted regarding participation in the study of least being conducted by Suzanne Cutbirth.	or the <i><name here=""></name></i> school adership capacity in schools
By signing this permission form, I understand that the following sprotect teaching staff choosing to participate:	safeguards are in place to
 All responses will be used for dissertation research and publications. All participation is voluntary, and may be withdrawn a prior to submission of the survey. All identities will be protected in all reports of the research and consent or refusal to participate in this study will be employment of participants in any way. 	t any point in the study arch.
Please keep the letter and a copy of the signed permission form for grant permission for the <i><name here=""></name></i> school building to particip complete the <i>Administrative Permission for School Participation</i> envelope and return to Suzanne Cutbirth as soon as possible.	oate in this study, please
I have read the material above, and any questions that I have pose satisfaction. I grant permission for the <i>Name Here</i> school build to participate in this study.	<u>-</u>
Chief Administrator's Signature	Date

Please return signed consent form (original) to Suzanne Cutbirth in the enclosed envelope.

Thank you for agreeing to participate.

Informed Consent Letter to High School Principal (Survey)

< Name of School>

Dear <Title> <First Name> <Last Name>

I would like to extend a personal invitation to you to participate in a research study entitled, An Examination of the Relationship of Emotional Intelligence Levels to Balanced Leadership Responsibilities and Leadership EFFECTIVENESSs in High School Principals. I am examining the leadership practices that lend themselves to increases in student achievement. The focus of this study is on principal behaviors and actions based in both emotional competence and administrative EFFECTIVENESSs. This study is part of my dissertation research for a doctoral degree in Educational Leadership and Policy Analysis from the University of Missouri-Columbia. The research gathered should be helpful in providing insight into high school leadership EFFECTIVENESSs and school improvement. The findings could serve to assist schools in developing effective leadership to support school improvement and impact student achievement. Your participation has been approved by your Superintendent.

Researcher: Suzanne Cutbirth, University of Missouri-Columbia Doctoral Candidate, scutbirth@missouristate.edu, (417) 527-1833.

Advisor: Dr. Barbara Martin, 4105 Lovinger Hall, Central Missouri State University, (660) 543-8823, bmartin@cmsu.edu.

Procedure: If you decide to participate in this study, you will have the opportunity to complete a self-assessment survey consisting of three sections (see attached survey). Knowing how precious little time you have, the survey was designed to take approximately 20 minutes of your personal time. A self-addressed stamped envelope is enclosed for your convenience. If you would like to receive survey results, mark the corresponding box on the consent form.

Participation: Participation in the study is completely voluntary. You may withdraw from participation at any time before the survey is submitted. Your consent to participate or refusal to participate will not affect your employment in any way. Please do not hesitate to contact me with any questions or concerns about your participation. You can call me at 417-527-1833. In addition, you are also welcome to contact the dissertation advisor for this research study, Dr. Barbara Martin, who can be reached at 660-543-8823.

Confidentiality: Individual survey results will remain confidential, anonymous, and separate from any identifying information. A pseudonym will be assigned to responses for use by the researcher. Only the researcher and the dissertation supervisor will have access to identifiable data. Collected data will be kept locked and destroyed three years after completion of this study. If you would like to receive survey results, mark the corresponding box on the consent form

Your identity and your building's identity will be confidential and remain anonymous in the reporting of results. I will not list any names of participants, or their corresponding institutions, in my dissertation or any future publications of this study.

Injuries: The University of Missouri does not compensate human subjects if discomfort eventually results from the research. Nonetheless, the university holds medical, professional, and general liability insurance coverage, and provides its own medical attention and facilities if participants suffer as a direct result of negligence or fault from faculty or staff associated with the research. In such unlikely event, the Risk Management Officer should be contacted immediately at (573) 882-3735 to obtain a review of the matter and receive specific information. Related ethical guidelines about Protection of Human Subjects set forth in the Code of Federal Regulations "45 CFR 46" will be upheld. This statement is not to be construed as an admission of liability.

Risks and Benefits: The risk of your participation in the study is minimal. The research gathered should be helpful in providing insight into leadership EFFECTIVENESSs and school improvement. The findings could serve to assist schools in developing effective leadership capacity for sustaining school improvement and impact student achievement.

Contact Information: This research has been preauthorized by the Institutional Review Board-IRBs of the University of Missouri-Columbia. If you have further questions regarding research participants' rights, please contact the University of Missouri-Columbia Campus Institutional Review Board at (573) 882-9585, or visit http://www.research.missouri.edu/cirb/index.htm or http://ohrp.osophs.dhhs.gov/humansubjects/guidance/ 45cfr46.htm For inquiries about your participation, please contact the researcher Suzanne Cutbirth by phone at (417) 527-1833, or by fax at (417) 829-5072, or by email at scutbirth@missouristate.edu. You may also contact the dissertation supervisor Dr. Barbara Martin at (660) 543-8823.

If you choose to participate in this study, please complete the attached consent form. A copy of this letter and your written consent should be retained by you for future reference. Thank you for your time and consideration.

Sincerely,

Suzanne Cutbirth Doctoral Candidate

Principal Informed Consent Form

I,agree to participate in the study of leadership effectiveness in high school being conducted by Suzanne Cutbirth.
effectiveness in high school being conducted by Suzanne Cutoffth.
By signing this consent form and participating in a focus group discussion, I understand that the following safeguards are in place to protect me: 1. My responses will be used for dissertation research and potential future publications. 2. My participation is voluntary, and may be withdrawn at any point in the study up until the time that the completed survey is submitted. 3. My identity will be protected in all reports of the research. 4. My consent or refusal to participate in this study will not affect my employment in any way.
Please keep the consent letter and a copy of the signed consent form for your records. If you choose to participate in this study, please complete the attached survey and signed consent form , seal them in the enclosed envelope and return to Suzanne Cutbirth as soon as possible.
I have read the material above, and any questions that I have posed have been answered to my satisfaction. I voluntarily agree to participate in this study.
Participant's Signature Date

Please return completed survey and signed consent form (original) to Suzanne Cutbirth in the enclosed envelope. Thank you for your participation.

Follow up Letter - Survey

Date

```
<Title><First Name><Last Name>
<Position>
<School District>
<Address>
```

Dear <Title><Last Name>,

About a week ago you received the survey I distributed titled *Self*—*Assessment of Emotion-Based Competencies and Leadership Behaviors*. This study is part of my dissertation research for a doctoral degree in educational leadership and policy analysis from the University of Missouri-Columbia. The research gathered should be helpful in providing insight into leadership behaviors and actions and school improvement. The findings could serve to assist schools in developing leadership EFFECTIVENESSs in sustaining school improvement and impacting student achievement.

I hope you found the packet to be self-explanatory and the survey easy to complete and return.

Please feel free to contact me if there are any problems. I genuinely appreciate your help with this project.

Sincerely,

Suzanne Cutbirth University of Missouri-Columbia (417) 527-1833 scutbirth@missouristate.edu

Thank You Letter

Date

```
<Title><First Name><Last Name>
<Position>
<School District>
<Address>
```

Dear <Title><Last Name>,

I would like to express sincere gratitude that you took time from your busy schedule to help me with my research study. The information from your completed survey/interview will be very helpful in providing insight into leadership behaviors and actions and school improvement. The findings could serve to assist schools in developing leadership EFFECTIVENESSs in sustaining school improvement and impacting student achievement.

I want to reassure you that I will maintain the confidentiality and anonymity of your participation and responses, both in my dissertation project and in all future published research on this topic.

I welcome you to call me should you wish to provide any additional insight or documentation that you feel will further enrich my study.

Sincerely,

Suzanne Cutbirth University of Missouri-Columbia (417) 527-1833 scutbirth@missouristate.edu

Informed Consent for Focus Group Participation:

< Name of School>

Dear <Title> <First Name> <Last Name>

I would like to extend a personal invitation to you to participate in a research study entitled, An Examination of the Relationship of Emotional Intelligence Levels to Balanced Leadership Responsibilities and Leadership EFFECTIVENESSs in High School Principals. I am examining the leadership practices that lend themselves to increases in student achievement. The focus of this study is on principal behaviors and actions based in both emotional competence and administrative EFFECTIVENESSs. This study is part of my dissertation research for a doctoral degree in Educational Leadership and Policy Analysis from the University of Missouri-Columbia and may be published. You must be 18 years of age to participate. Your participation has been approved by your Superintendent and Principal.

Researcher: Suzanne Cutbirth, University of Missouri-Columbia Doctoral Candidate, scutbirth@missouristate.edu, (417) 527-1833.

Advisor: Dr. Barbara Martin, 4105 Lovinger Hall, Central Missouri State University, (660) 543-8823, bmartin@cmsu.edu.

Procedure: If you decide to participate in this study, you will take part in a focus group discussion with 5-7 other participants, which will be led by a focus group facilitator and a focus group assistant/observer. The session will be audio-taped and transcribed into a written format for later analysis. The questions that the focus group facilitator will ask will address your insights and opinions concerning principal behaviors and activities that contribute to the support of increased student achievement. You will also be asked to complete a brief demographic survey. The focus group session will last approximately 1 to 1½ hours. Focus group participants will be chosen at random from the pool of volunteers submitting participation agreements. The focus group session will be conducted at your school location at a time outside of the normal school day that will be convenient to participants. Teachers in this study must be currently employed at the school building and be at least 18 years of age to participate.

Participation: Participation in the study is completely voluntary. You may withdraw from participation at any time you wish without penalty, including in the middle of the focus group interview or after it is completed. Your consent to participate or refusal to participate will not affect your employment in any way. You may also decline to answer any questions that you feel uncomfortable answering. Please do not hesitate to contact me with any questions or concerns about your participation. You can call me at 417-527-1833. In addition, you are also welcome to contact the dissertation advisor for this research study, Dr. Barbara Martin, who can be reached at 660-543-8823.

Confidentiality: Tapes and transcripts will remain confidential, anonymous, and separate from any identifying information. A pseudonym will be assigned to responses for use by the

researcher. You will have the opportunity to verify the transcribed interview for accuracy of what was stated and what you intended. Edits, deletions, and clarifications will be made immediately to the transcript to comply with your right to voluntarily release data. Only the researcher and the dissertation supervisor will have access to identifiable data. Collected data will be kept locked and destroyed three years after completion of this study.

Your identity and your building's identity will be confidential and remain anonymous in the reporting of results. I will not list any names of participants, or their corresponding institutions, in my dissertation or any future publications of this study.

Injuries: The University of Missouri does not compensate human subjects if discomfort eventually results from the research. Nonetheless, the university holds medical, professional, and general liability insurance coverage, and provides its own medical attention and facilities if participants suffer as a direct result of negligence or fault from faculty or staff associated with the research. In such unlikely event, the Risk Management Officer should be contacted immediately at (573) 882-3735 to obtain a review of the matter and receive specific information. Related ethical guidelines about Protection of Human Subjects set forth in the Code of Federal Regulations "45 CFR 46" will be upheld. This statement is not to be construed as an admission of liability.

Risks and Benefits: The risk of your participation in the study is minimal. The research gathered should be helpful in providing insight into leadership capacity and school improvement. The findings could serve to assist schools in building leadership capacity for sustaining school improvement and impact student achievement.

Contact Information: This research has been preauthorized by the Institutional Review Board-IRBs of the University of Missouri-Columbia. If you have further questions regarding research participants' rights, please contact the University of Missouri-Columbia Campus Institutional Review Board at (573) 882-9585, or visit http://www.research.missouri.edu/cirb/index.htm or http://ohrp.osophs.dhhs.gov/humansubjects/guidance/ 45cfr46.htm For inquiries about your participation, please contact the researcher Suzanne Cutbirth by phone at (417) 527-1833, or by fax at (417) 829-5072, or by email at scutbirth@missouristate.edu. You may also contact the dissertation supervisor Dr. Barbara Martin at (660) 543-8823.

If you choose to participate in this study, please complete the attached consent form. A copy of this letter and your written consent should be retained by you for future reference. Thank you for your time and consideration.

51	nc	er	el	y	,

Suzanne Cutbirth Doctoral Candidate

Informed Consent Form

i, agree to	participate ii	n me study o	i leadership	
effectiveness in high school being conducted by Suzann	e Cutbirth.	-	•	
By signing this consent form and participating in a focu following safeguards are in place to protect me: 1. My responses will be used for dissertation respublications. 2. My participation is voluntary, and may be with 3. My identity will be protected in all reports of 4. My consent or refusal to participate in this strength of the protected in any way.	search and p thdrawn at a the research	otential futurny point in the	re	the
Please keep the consent letter and a copy of the signed of choose to participate in this study, please complete the a fin the enclosed envelope and return to Suzanne Cutbirth and include contact information so that focus group me communicated to you.	nttached <u>sign</u> n as soon as j	ned consent for consible. <i>Ple</i>	form and sea case to be sur	
I have read the material above, and any questions that I satisfaction. I voluntarily agree to participate in this study	-	have been an	swered to my	У
Participant's Signature]	Date		
Contact Information:				
Phone(circle one) WORK	HOME	CELL	
Best time for contact:				
Email				
Other				

Please return signed consent form (original) to Suzanne Cutbirth in the enclosed envelope.

Thank you for agreeing to participate.

Appendix C

Focus Group

- 1. Participant Demographic Survey
- 2. Focus Group Protocol

DEMOGRAPHIC SURVEYFocus Group Participant

DEMOGRAPHICS: (Please check all that apply)
Gender: Male Female
Ethnicity: ☐ White (Non-Hispanic) ☐ Black (Non-Hispanic) ☐ Hispanic
☐ Native American ☐ Asian/Pacific Islander ☐ Other
Education : □ Bachelor's □ Master's □ Specialist's □ Doctorate
Total Years of Teaching Experience
Years in Present Position
Age (optional)
Thank you for your participation – Optional: Write comments or feedback about this focus group discussion. (<i>Please use additional sheet if necessary</i>)

Focus Group: Participating Principal's Staff Members

Participating Principal	
Date:	Start Time:

Introduction:

Good afternoon and welcome. Thank you for taking the time to join our discussion about principal leadership. My name is Suzy Cutbirth, and I will serve as the moderator for today's focus group. Assisting me is Dr. Marsha Lay who will be observing and taking notes. In order to ensure accuracy I will be audio taping the discussion. The purpose of today's discussion is to get information from you about the leadership style and behaviors exhibited by your principal <insert name> . You were invited because you are all members of the staff here at <insert name of school>.

Please remember, there are no right or wrong answers but rather differing points of view. Feel free to share your point of view even if it differs from what others have said. If you want to follow-up on something that someone has said, you want to agree, disagree or give an example, feel free to do that. I want this to be more of a conversation among yourselves, so don't feel like you have to respond to me all of the time. I am here to ask questions, listen and make sure everyone has a chance to share. I am interested in hearing from each of you. Please speak up and remember only one person should talk at a time.

Our session will last about ninety minutes and we will not be taking a formal break. Feel free to leave the table for any reason if you need to. I have placed name cards in front of you to help me facilitate the discussion, but no names will be included in any reports. Let's begin by going around the room and finding out more about each other.

- 1. Tell us your name, your job position and how long you have been here at *<insert name of school>*.
- 2. How would you describe Principal *<insert name>*'s leadership style?
- 3. How does the principal react when conflict arises among the staff?
- 4. How well does the principal recognize the needs of the staff?
- 5. How does the principal encourage choice or establish options for others in your school?
- 6. Describe the how the principal responds to change and/or breaks from tradition?
- 7. How does your principal communicate the school's shared vision that lets you know that the vision is alive and well?
- 8. How would you describe the relationship between the principal and the staff? Students?
- 9. What type of encouragement does the staff receive from the principal?

- 10. What is celebrated at your school?
- 11. Describe the levels of collaboration, shared decision-making, and divergent thinking at your school.

Appendix D

Principal Participant Interview Protocol

Participating Principal's Interview Session

Partic	ip	pating Principal
Date:	_	Start Time:
Good leade: Marsl taping	l a rsi ha	action: afternoon thank you for taking the time to answer my questions focused on your principal hip. My name is Suzy Cutbirth, and I will be conducting the interview. Assisting me is Dr. a Lay who will be observing and taking notes. In order to ensure accuracy I will be audio the interview. The purpose of this interview is to get information from you about your all leadership style and behaviors.
		remember, there are no right or wrong answers. If you want to follow-up on a question or example, feel free to do that. I want this to be more of a conversation.
1		How long have you been principal at <i><insert name="" of="" school=""></insert></i> .
2	•	Have you had any previous educational administrative experience? At what level? How long?
3	•	Follow-up: How did that previous experience compare to your experience at <i><insert< i=""> name of school>?</insert<></i>
4		How would you describe your leadership style?
5		How do you handle conflict among staff members?
6		How would you describe your relationship with your staff?
7		How are decisions made at <i><insert name="" of="" school="">?</insert></i>
8	•	What major change initiatives (if any) have you been involved in at <i><insert name="" of="" school="">?</insert></i>
9		Follow-up (7): Has the change been implemented successfully? Why or why not?
1	0.	Follow-up (7): How have you handled resistance to implementing the change?
1	1.	What type of support do you provide your staff?
1	2.	Follow-up (11): How do you determine the type of support that your staff need?

14. Describe the levels of collaboration, and divergent thinking at your school.

13. What is celebrated at your school?

Appendix E

Comparative Summary of Authors and Researchers Addressing Study Constructs

- Leadership Theory
- Leadership Effectiveness
- o Emotional Intelligence
- o Measurement of Emotional Competency

Chronology of Relevant Research and Literature	Leadership	Leadership Effectiveness	Emotional Intelligence	Measuremen of Emotiona Competency
Ohio State Studies (n.d.)	X			1 3
SEDL (n.d.)	X	X		
Thorndike & Stein (1937)			X	
Wechsler (1940)			X	
Katz & Kahn (1952)	X	X		
Fleishman (1953)	X	X		
Fielder (1967)		X		
Hersey & Blanchard (1977)	X	X		
Burns (1978)	X			
Russell (1979)			X	
Gardner (1983)			X	
Blake & Mouton (1985)	X	X		
Spillaine (1985)		X		
Sternberg & Caruso (1985)			X	
Payne (1986)			X	
Fielder & Garcia (1987)	X	X		
Kouzes & Posner (1987)		X		
Meyer & Gaschke (1988)			X	
Bass & Avillo (1990)	X			
Andrews & Robinson (1991)			X	
Green, Goldman, & Salovey			X	
(1993) Bagby, Parker & Taylor (1994)			X	
Salovey & Meyer (1995)			X	
Goleman (1995)		X	X	X

Chronology of Relevant Research and Literature	Leadership	Leadership Effectiveness	Emotional Intelligence	Measurement of Emotional Competency
Block & Kreman (1996)			X	
Bar-On (1997)			X	X
Bolman & Deal (1997)	X	X		
Bruffee (1997)	X	X		
Fielder (1997)				
Sadler (1997)	X			
Morgan (1998)	X			
Bass (1999)	X			
Leithwood & Duke (1999)	X			
Loeb& Kindel (1999)	X			
Mayer et.al. (1999)				X
Boyatzis, Goleman, & Rhee (2000)				X
Cherniss (2000)				X
Goleman (2000)		X		
Leithwood, Jantzi, & Steinbach (2000) Sergiovanni (2000)	X X			
	Α		X	
Sternberg (2000) Ziekel (2000)			X	
Wells, Torie, & Prindle (2000)			X	
Fullan (2001)	X	X	A	
Rafaeli & Worline (2001)	Α	71	X	
Schutte, et al (2001)			Α	X
Greenleaf (2002)	X			Λ
Castro (2003)	X			
Daus, & Ashkansky (2003)	Α			X

Chronology of Relevant Research and Literature	Leadership	Leadership Effectiveness	Emotional Intelligence	Measurement of Emotional Competency
Davis (2003)	X			1 2
Kouzes & Posner (2003)	X	X		
Marzano, Waters & McNulty (2003)		X		
George (2004)	X			
McREL (2004)		X		
Schein (2004)	X	X		
Webb (2004)			X	
Caruso (2005)			X	
Rosete (2005)	X			X
Rosete & Ciarrochi (2005)	X			
Alimo-Metcalfe (2006)	X			
Changing Minds (2006)	X			
Doyle & Smith (2006)	X			
Spillane (2006)	X			
Spillane & Camburn (2006)	X			
Yukl (2006)	X	X		

Note: This table is not all inclusive of the above authors' range of writings or research, or the entire body of sources on the subjects above.

Appendix F

Subscale Item Listings

- 1. Emotion Based Competencies Subscale Items
- 2. Leadership Behaviors Subscale Items

EMOTION BASED COMPETENCIES SUBSCALE ITEMS

SELF AWARENESS

EBC2	I am aware of my personal strengths.
EBC5	I am trustworthy.
EDC5	1 and trustworting.
EBC6	I use intuitive feelings to guide my decisions.
EBC8	I am able to read my own emotions.
	I am motivated by inner standards of excellence to improve personal
EBC13	performance.
EBC17	I am adept at overcoming obstacles.
EBC22	I possess a strong sense of personal self-worth.
EBC24	I display honesty and integrity.
EBC28	I am aware of my personal limitations.
EBC30	I am capable of excellence as a leader.

SOCIAL AWARENESS

EBC3	I recognize the existence of social networks within my school.
EBC10	I am adept at accurately sensing the emotions of others.
EBC14	I am able to recognize the needs of my staff.
EBC15	I seek out the positive in any situation.
EBC19	I actively seek to understand perspectives different than my own.
EBC23	I take an active interest in the concerns of others.
EBC26	I recognize the political forces at work in my school.
EBC27	I recognize the impact of my emotions on my patterns of behavior.

RELATIONSHIP MANAGEMENT

EBC4	I am able to effectively resolve disagreements among staff.
EBC7	I use a compelling vision to guide and motivate staff.
EBC9	I am comfortable leading change resulting in movement in a new direction.
EBC18	I support the efforts of others through feedback and guidance.
EBC20	I support staff collaboration and teamwork.
EBC21	I possess a wide range of tactics for persuasion.
EBC25	Meeting the needs of my staff is a priority.
EBC29	I am willing to act as a change catalyst.

SELF MANAGEMENT

EBC1	I readily adjust to changing situations.
EBC11	I am able to keep my own disruptive emotions and impulses under control.
EBC12	I am willing to seize opportunities and act.
EBC16	I am willing to advocate for change in the face of opposition.

LEADERSHIP BEHAVIORS SUBSCALE ITEMS

INTERPERSONAL

LB4	I am aware of the personal needs of individual staff members.		
LB5	I actively support systematic dialogue regarding current research on effective schooling.		
LB6	I initiate activities and practices that expose staff to current research effective schooling.		
LB16	I systematically and fairly recognize the failures of the school as a whole.		
LB17	I regularly engage in activities to keep informed about current research and theory on effective schooling.		
LB18	I maintain personal relationships with staff members.		
LB24	I support performance versus seniority as a primary criterion for staff rewards and recognition.		
LB25	I encourage teachers staff members to accomplish things that they perceive to be beyond their grasp.		
LB27	I systematically and fairly recognize and celebrate the accomplishments of teachers.		
LB29	I am the driving force behind major initiatives.		
LB30	I regularly acknowledge significant events in the lives of staff members.		
LB32	I remain informed about significant personal issues within the lives of staff members.		
LB36	I consider hard work and results as the basis for staff rewards and recognitions.		
LB41	I consistently model a positive attitude about the ability of staff to accomplish substantial things.		

INTRAPERSONAL

TI I I I I I I I	ERSONAL
LB1	My behaviors are consistent with my beliefs about schools, teaching, and learning.
LB3	Staff members are aware of my beliefs about schools, teaching, and learning.
LB7	I modify my leadership style to adapt to different situations.
LB8	I am willing to lead change initiatives with uncertain outcomes.
LB9	I systematically consider new and better ways of doing things.
LB12	I exercise both directive and nondirective leadership behaviors as the situation warrants.
LB23	I consistently attempt to operate at the edge versus the center of the school's competence.
LB28	I am comfortable with making major changes in how things are done.
LB35	I provide conceptual guidance to staff regarding effective classroom practices.
LB39	I consciously challenge the status quo
LB42	I encourage others to express diverse opinions.

EXTERNAL CONTEXT

LB2	I am a strong advocate of the school and staff with the parents.
LB10	I make systematic and frequent visits to classrooms.
LB11	I am a strong advocate of the school and staff with central office.
	I work to maintain an awareness of issues in the school that have not surfaced
LB15	but could create discord.
LB19	I am able to accurately predict what could go wrong from day to day.
	I work to maintain an awareness of informal groups and relationships among
LB26	staff members.
LB40	I am a strong advocate of the school and staff with the community at large.

ORGANIZATIONAL CONTEXT

LB13	I am easily accessible to staff.	
	I systematically provide opportunities for staff input on all important	
LB14	decisions.	
LB20	I systematically promote a sense of well-being among staff.	
LB21	I continually keep attention focused on established goals.	
LB22	Leadership teams play a role in decision-making at our school.	
	I systematically promote and support an understanding of purpose among	
LB31	staff.	
LB33	I systematically promote cohesion among staff.	
	I have supported and maintained effective means for communication among	
LB34	staff members.	
	I systematically promote and support a shared vision among staff of what the	
LB37	school could be like.	
LB38	I maintain open and effective lines of communication with staff.	

Appendix G

Focus Group Demographics

Number of Participants

Gender

Highest Educational Degree Earned

Years in Education

Job Responsibilities

Years in District

Ethnicity

	Focus Group 1	Focus Group 2
Number of Participants	12	15
Gender		
male	17%	20%
female	83%	80%
Highest Educational Degree Earned		
Bachelor s	33%	53%
Masters	67%	47%
Years in Education		
0-3	25%	40%
4-5	8%	7%
6-10	17%	7%
11-15	0%	20%
16-20	0%	13%
21-25	17%	0%
26-30	25%	0%
more than 30	8%	13%

	Focus Group 1	Focus Group 2
Job Responsibilities*		
Classroom Teacher	67%	60%
Special Needs Teacher	0%	7%
Titlw One Teacher	0%	0%
Instructional Coach	0%	7%
Teacher Leader	0%	7%
Counselor	8%	13%
Support Staff	0%	13%
Other	25%	0%
Years in District		
0-3	50%	48%
4-5	8%	13%
6-10	8%	13%
11-15	17%	20%
16-20	8%	0%
more than 20	8%	7%
Ethnicity		
White	100%	100%
Black (non-Hispanic)	0%	0%
Hispanic	0%	0%
Native American	0%	0%
Asian/Pacific Islander	0%	0%
Other	0%	0%

Appendix H

Transcript Data Codes

I	Interview
P1	Principal, Low Achieving School, #1 (n=2)
PH1	Principal, High Achieving School, #1 (n=3)
FG1	Focus Group 1
FG2	Focus Group 2
IPH - 35 - 1071	Underlined section indicates the page number of data
IPH – 35 - <u>1071</u>	Underlined section indicates the line number of data

VITA

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