Emotional Intelligence: The Link to School Leadership Practices

That Increase Student Achievement

by

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Dissertation Approval

As members of the dissertation committee for Karen Kay Wendorf-Heldt, and on behalf of the Doctoral Leadership Studies Department at Cardinal Stritch University, we affirm that this report meets the expectations and academic requirements for the Ph.D. degree in Leadership for the Advancement of Learning and Service.

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Abstract

The global economy and recent federal legislation demand that today's public school principals increase student achievement (U.S. Department of Education, 2002). As such, principals need to know what leadership practices will make a difference in student learning. Marzano, Waters, and McNulty (2005) conducted a meta-analysis of relevant research to determine that 21 school leadership practices positively impact student achievement. At the same time, other research has been done linking emotional intelligence to effective leadership that enhances organizational performance (Goleman, Boyatzis, & McKee, 2002).

The purpose of the mixed methods, explanatory design study was to determine if a relationship exists between emotional intelligence and research-based school leadership practices. A random sample of 285 public school K-12 principals in the state of Wisconsin was surveyed using a valid, reliable, two-part instrument designed by the researcher. Part one of the survey measured principals' engagement in the 21 leadership practices. Part two of the survey measured principals' emotional intelligence. Correlation research was conducted using the two parts of the self-report survey and results were analyzed. Additionally, eleven principals from the survey sample, demonstrating high levels of emotional intelligence and high levels of engagement in research-based school leadership practices, were interviewed to gain further insight into their formation as leaders and their leadership practice.

Results of the study indicate that there is a strong, positive correlation between emotional intelligence and research-based school leadership practices and that the development of emotional intelligence is influenced by identifiable and replicable factors.

Therefore, it is reasonable to conclude that districts that make an intentional effort to create awareness of emotional intelligence, as well as to hire, develop, and retain emotionally intelligent school leaders may be more likely to reach their organizational goals related to increasing the academic achievement of all students.

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CHAPTER ONE: INTRODUCTION

Background of the Study

Global economy demands of the twenty-first century (Friedman, 2005), as well as federal legislation (U.S. Department of Education, 2002), require public school principals to take seriously their responsibility to ensure that all students achieve at high levels. Therefore, principals striving to be accountable to this charge must identify what, within their own leadership practices, makes a difference in student achievement. Marzano, Waters, and McNulty (2005) conducted a meta-analysis of relevant research and determined that 21 leadership practices, which they refer to as leadership responsibilities, positively impact student achievement. Recent research has also linked emotional intelligence to effective leadership that enhances organizational performance (Goleman, Boyatzis, & McKee, 2002). Both lines of research could offer principals insights into strengthening the effectiveness of their leadership practices to positively impact student achievement thereby meeting the demands of twenty-first century school leadership.

Leaders, by virtue of being human, are emotional beings (Damasio, 1994). The purpose of this study was to explore the connection between emotional intelligence in public school leaders and their engagement in research-based school leadership practices. Specifically, the study was conducted to determine if such a relationship exists between emotional intelligence and the 21 leadership responsibilities that increase student achievement as identified by Marzano et al. (2005) and to understand the implications for leadership practice.

Statement, History, and Current Status of the Problem

Prior to 1980 public school principals were primarily managers of school staff, facilities, programs, supplies, and student discipline (Fredericks & Brown, 1993). Calls for public school reform in the later part of the twentieth century have lead to shifts in critical leadership skills so that the demands for today's principal now include additional responsibilities for student achievement, program development and monitoring, nurturing professional learning communities, and accountability (DuFour & Eaker, 1987; Stronge, 1993). Unfortunately, school districts still hire managers for positions that demand leadership. The result may be under-realized goals for increased student achievement.

The changing role of the school principal from management to instructional leadership has lead to research efforts designed to discover what principals do that actually impacts student achievement (Cotton, 2003; Goleman et al., 2005). Much more is known about effective leadership and about what works in organizations today than was known ten, twenty, or thirty years ago. In spite of this knowledge, organizations tend to rely on the status quo, largely ignoring what has been discovered within the research, and instead continue to rely on a machine model of organizational management (Block, 2003; Wheatley, 1999). As a result, in the school organizational setting, student achievement may have fallen short of its potential and may not have been maximized because of principal leadership behaviors that either do little or nothing to enhance achievement and may actually inhibit gains in student achievement.

Leadership continues to be a topic of great interest and study as evidenced by the proliferation of books to be found on the subject (Heifetz & Linsky, 2002; Kouzes & Posner, 2002; Maxwell, 1999; Starratt, 2004; Wheatley, 1999). In the past decade, the

emotional dimension of intelligence has been investigated and promoted as an important

ingredient in successful leadership (Dickmann & Stanford-Blair, 2002; Goleman, et al.,

2002). At the same time, improving student learning continues to be a national priority.

Federal, state, and local agencies are working to establish high standards for learning,

ensure highly qualified educational staff, and assess students and schools to determine if

adequate yearly progress toward 100 percent proficiency is being met. Now, more than

ever, educational leaders are seeking research-based means to increase their own

effectiveness at improving student achievement.

Marzano et al. (2005) link research-based school leadership practices to improved

student achievement. They conducted a meta-analysis of 69 studies involving 2,802

schools, concluding that 21 leadership practices influence the overall achievement of

students: 1) affirmation, 2) change agent, 3) contingent rewards, 4) communication,

5) culture, 6) discipline, 7) flexibility, 8) focus, 9) ideals and beliefs, 10) input,

11) intellectual stimulation, 12) involvement in curriculum, instruction, and assessment,

13) knowledge of curriculum, instruction, and assessment, 14) monitoring and evaluating,

15) optimizer, 16) order, 17) outreach, 18) relationships, 19) resources, 20) situational

awareness, and 21) visibility.

In addition to the research on effective school leadership, research can be found

related to emotional intelligence (Goleman, 1998; Goleman et al., 2002). Within that

body of literature, substantial research has been completed on developing social and

emotional learning in children; however, there is an absence of research connecting adult

emotional intelligence to effective leadership practices specific to the school setting.

Most research related to emotional intelligence and leadership has been done and applied

in corporate organizational settings. In such settings, the research has demonstrated repeatedly that emotional intelligence contributes to successful leadership (Bryant, 2000; Goleman et al., 2002; Holt & Jones, 2005).

This study examined if a relationship exists between emotional intelligence and research-based school leadership practices that impact student achievement. Additionally, this study investigated influences on leadership formation to provide insights into how emotionally intelligent school leaders came to be the way they are. The study also investigated practices exemplifying emotionally intelligent school leadership to elicit craft knowledge related to emotionally intelligent leadership.

The research presented in this current study could enable educational leaders to better understand the relationship between emotionally intelligent leadership and school leadership practices that positively impact student achievement. This knowledge could have significant implications for improving the effectiveness of school leadership toward the goal of improving student achievement. This knowledge could also have implications for hiring and leadership development practices utilized within public school systems.

Theory and Action Related to the Problem

Two major theoretical frameworks underpin this study. The first is related to the construct of emotional intelligence (Goleman et al., 2002). The second is related to research-based school leadership practices that increase student achievement (Marzano et al., 2005).

The construct of emotional intelligence is relatively new. Prior to 1995 there was limited research related to emotional intelligence in the scientific literature. According to Daniel Goleman (2005), a leading researcher in emotional intelligence, psychologists like

E. L. Thorndike in the early twentieth century and Robert Sternberg and Howard Gardner in the later part of the twentieth century theorized that intelligence was more than intellectual capacity. However, it was psychologists Peter Salovey and John Mayer (1990) who originated the concept of emotional intelligence, formally introduced the term, and worked to gain acceptance of it within the scientific community.

Salovey and Mayer (1990) conceptualized emotional intelligence (EQ) as a mental ability in much the same way that traditional intellectual intelligence (IQ) was viewed. Their theoretical framework consisted of five domains: 1) knowing one's emotions, 2) managing emotions, 3) motivating oneself, 4) recognizing emotions in others, and 5) handling relationships. Another psychologist, Reuven Bar-On (1997), in his research on general well-being, proposed a related model of emotional intelligence, describing it as a set of non-cognitive skills grouped into five subsets: 1) intrapersonal, 2) interpersonal, 3) adaptability, 4) stress management, and 5) general mood. Goleman (1998, 2005) popularized the concept of emotional intelligence and applied his research specifically to the field of organizational leadership. Goleman, with research colleagues Boyatzis and McKee, (2002) developed a theoretical framework in which emotional intelligence encompassed personal competencies (how we manage self) and social competencies (how we manage self interacting with others). These competencies were grouped in four domains: 1) self-awareness, 2) self-management, 3) social awareness, and 4) relationship management.

The meta-analysis of research from 1978 to 2001 conducted by Marzano et al. (2005) sought to answer the question, "What does research tell us about school leadership" (p. 9). In computing the correlation between principals' leadership practices

and the average academic achievement of students in the school, Marzano and his

colleagues found the average correlation to be .25. This meant that, assuming the average

achievement of students in a school was at the 50th percentile and the leadership skill of

those students' principal was also at the 50th percentile, increasing the leadership ability

of that principal by one standard deviation (from 50% to 84%) would be expected to

produce a 10 percentile gain in students' achievement over time (moving them from 50th

percentile to the 60th percentile). Increasing the principal's leadership abilities from the

50th percentile to the 99th percentile would be expected to cause a rise in student

achievement from the 50th percentile to the 72nd percentile. The researchers concluded,

"a highly effective school leader can have a dramatic influence on the overall academic

achievement of students" (p. 10).

From the meta-analysis, Marzano et al. (2005) identified 21 specific leadership

practices impacting the overall achievement of students in the manner described above. A

factor analysis indicated that all 21 leadership practices identified were important to first-

order or incremental changes that take place in schools. First-order changes are perceived

to be "an extension of the past, within existing paradigms, consistent with prevailing

values and norms, and implemented with existing knowledge and skills" (Waters &

Cameron, n.d., p. 28). Seven of the 21 leadership practices were related to more complex

and dramatic or second-order changes that take place in schools: 1) ideals and beliefs,

2) optimize, 3) flexibility, 4) knowledge of curriculum, instruction and assessment,

5) intellectual stimulation, 6) change agent, and 7) monitor and evaluate. Second-order

changes are perceived to be "a break with the past, outside of existing paradigms,

conflicted with prevailing values and norms, and requiring new knowledge and skills to implement" (Waters & Cameron, n.d., p. 28).

Consideration of these two theoretical frameworks, and determining if a relationship exists between them, could add important knowledge to the field of educational leadership. The research could assist educational leaders to better understand what they can do to have the greatest effect on student learning. Utilizing emotional intelligence and engaging in specific research-based school leadership practices could provide principals a path toward achieving what they are called and being held accountable to do—increase student achievement to meet the global demands required in the twenty-first century.

Need for Further Study of the Problem

In spite of the emphases on leadership, emotional intelligence, improving student learning, and school leadership that works, there is limited research that specifically connects or attempts to connect emotional intelligence to research-based school leadership practices that improve student achievement. Research has been completed on teacher behaviors that lead to increased student achievement (Marzano, Pickering, & Pollock, 2001). Recent work has also yielded relevant research on principal behaviors that impact student achievement (Marzano et al., 2005). Given the increasing pressures felt by school leaders to enhance student achievement, the accumulating evidence that emotionally intelligent leadership matters in the success of organizations, and the research we now have that articulates those school leadership practices that impact student achievement, it would be beneficial to discover if a relationship exists between emotional intelligence and research-based school leadership practices.

A valid, logical argument exists for this proposed line of inquiry. If the premise is true, as Marzano et al. (2005) assert, that the 21 school leadership practices they identified increase student achievement, and if there is a significant correlation between emotional intelligence and those 21 school leadership practices, then emotionally intelligent leadership would be related to increasing student achievement. Figure 1 visually represents this argument.
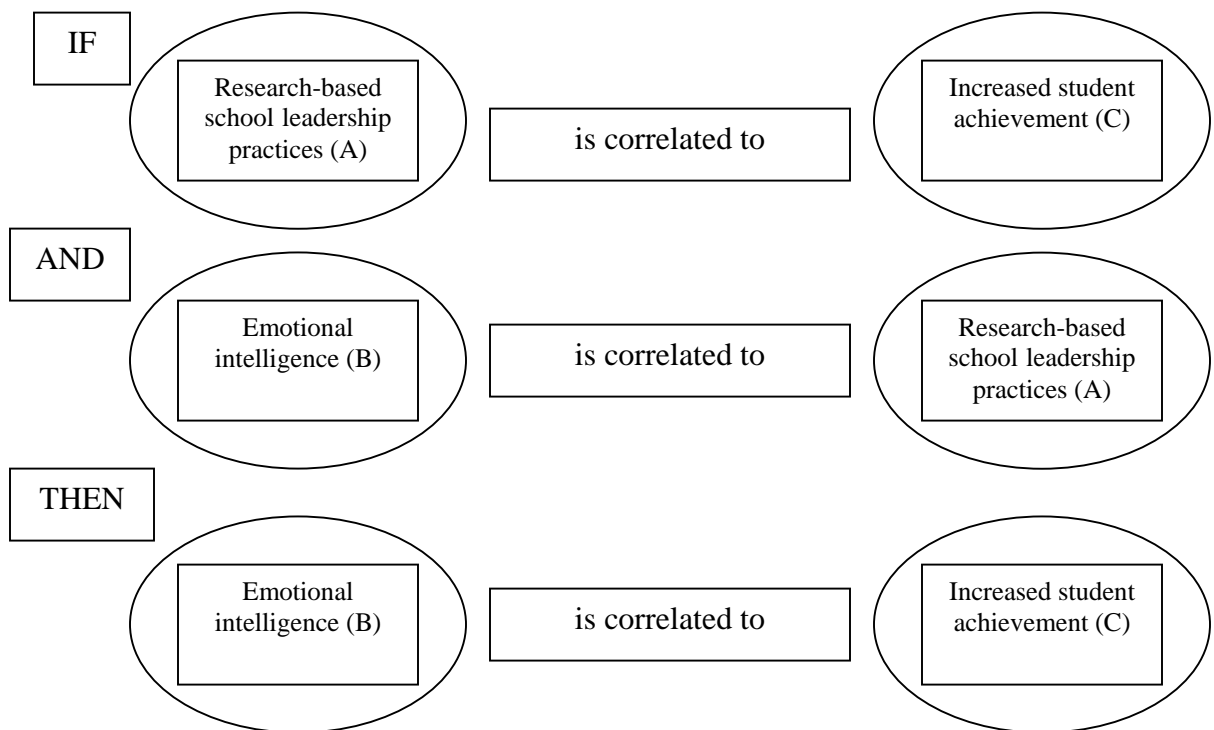
Figure 1. Representation of logical argument embedded in the research.

Research by Marzano et al. (2005) has confirmed the correlation between research-based school leadership practices (A) and increased student achievement (C). This study was conducted to determine if emotional intelligence (B) is correlated to research-based school leadership practices (A). If this study confirmed the correlation between emotional intelligence and research-based school leadership practices, it would be logical to

conclude that emotional intelligence (B) is also correlated to increased student achievement (C). It is critical to note, however, that correlation, if found, does not imply causality.

Purpose of the Study

The purpose of this study was to determine if a relationship exists between emotional intelligence and research-based school leadership practices that increase student achievement. Additionally, the study sought to identify which, if any, research-based school leadership practices were most strongly correlated to emotional intelligence competencies. Lastly, the purpose was to investigate influences on the formation of emotionally intelligent leadership to understand how emotionally intelligent leaders came to be the way they are and to identify examples of emotionally intelligent leadership practices to elicit craft knowledge related to what emotionally intelligent school leadership looks like. The related research questions were:

1. Is there a relationship between emotional intelligence and research-based school leadership practices that have been identified to increase student achievement?

2. If so, what specific research-based school leadership practices have the strongest positive correlations to each of the emotional intelligence competencies?

3. What insights can school leaders, who demonstrate high levels of emotional intelligence and engagement in research-based school leadership, provide into their formation as leaders and their leadership practice?

Approach of the Study

This study employed a mixed methodology, primarily quantitative in nature yet also utilizing qualitative methods. Data were collected through a survey of a random sample of the population of public school K-12 principals in the state of Wisconsin. The researcher designed and used a two-part survey to measure both the principals' engagement in leadership practices according to the 21 responsibilities Marzano et al. (2005) identified and to measure the principals' emotional intelligence in the competencies proposed by Goleman et al. (2002).

Correlations between part one and part two of the survey were calculated to determine if a relationship exists between emotional intelligence and school leadership practices that impact student achievement. K-12 Wisconsin public school principals who had the highest scores on part one and part two of the self-report survey, and who indicated an interest in follow-up on the original survey, were contacted for participation in a personal interview. The purpose of the follow-up interviews was to investigate influences on their formation as leaders and examples of emotionally intelligent leadership practices in the school setting.

Significance of the Study

Goleman (2005) concluded that approximately twenty percent of success in one's career could be accounted for by traditional intelligence, that is, IQ. That leaves approximately eighty percent for which there is no account. While Goleman does not argue that the other eighty percent is attributed only to emotional intelligence, he does argue there is substantial room for one's mental and emotional abilities, skills, and competencies to either hinder or enhance one's capacity to function productively in the

social context of the world—including the world of work. Goleman argued that

emotional intelligence impacts leadership effectiveness asserting that "EI [emotional

intelligence] abilities rather than IQ or technical skills emerge as the 'discriminating'

competency that best predicts who among a group of very smart people will lead most

ably" (p. xv).

A plethora of researchers concluded that emotional intelligence can be learned

(Cherniss, 1998, 2000; Cooper, 1997; Dearborn, 2002; Kunnanatt, 2004; Lynn, 2005;

O'Neal, 1996; Scarfe, 2000; Taylor & Bagby, 2000). As with traditional intelligence,

some level of emotional intelligence is fixed (nature), however, much is malleable

(nurture). Research studies conclude that learning organizations that are aware of the

impact of emotional intelligence on productivity, quality of work, retention of employees,

and job satisfaction can purposefully work to increase the emotional intelligence capacity

of their people (Beecham & Grant, 2003; Cooper, 1997; Goleman et al., 2002; Weisinger,

1998). Training that is intense, sustained, and based in job-embedded practice of the

competencies is most conducive for sustained learning to occur (Goleman et al., 2002).

Research on the brain demonstrates that emotional intelligence impacts

leadership. The open loop nature of the limbic system means that leaders and followers

influence each other emotionally and rationally. In essence, you can catch feelings from

other people (Goleman et al., 2002). This has significance as leaders are in a position to

set the tone for their organizations:

The leader sets the emotional standard. Leaders give praise or withhold it,

criticize well or destructively, offer support or turn a blind eye to people's needs.

They can frame the group's mission in ways that give more meaning to each

person's contribution—or not. They can guide in ways that give people a sense of

clarity and direction in their work and that encourages flexibility, setting people

free to use their best sense of how to get the job done. All these acts help

determine a leader's primal emotional impact. (Goleman et al., p. 9)

It is proposed that leaders have the position power to create health or toxicity,

resonance or dissonance. Toxic leadership and dissonance leads to instability and non-

productivity within the organization (Goleman et al., 2002; Lipman-Blumen, 2005). As

Goleman and his colleagues (2002) note:

While mild anxiety (such as over a looming deadline) can focus attention and

energy, prolonged distress can sabotage a leader's relationships and also hamper

work performance by diminishing the brain's ability to process information and

respond effectively. A good laugh or an upbeat mood, on the other hand, more

often enhances the neural abilities crucial for doing good work. (p. 12)

Emotionally intelligent leaders can promote and model pleasant moods and establish

positive cultures and climates in the workplace. Those who do so are in a better position

to create healthy, productive organizations that responsively serve identified needs and

organizational mission.

The literature asserts that emotional leadership intelligence is a central trait in the

best leaders (Bradberry & Greaves, 2005; Goleman et al., 2002; Ryback, 1998). Such

leaders are strong both intellectually and emotionally. For a long time society has tried to

separate emotions from intellect and, most certainly, has insisted on doing so in the

workplace. Goleman (2005) maintains that emotions and intellect are not a case of

either/or so much as it is *both/and*:

How we do in life is determined by both—it is not just IQ, but *emotional intelligence* that matters. Indeed, intellect cannot work at its best without emotional intelligence. Ordinarily the complementarity of limbic system and neocortex, amygdala and prefrontal lobes, means each is a full partner in mental life. When these partners interact well, emotional intelligence rises—as does intellectual ability. (p. 28)

Goleman argues that what leaders must be responsive to demands that they be emotionally intelligent, as well as intellectually competent. Heart *and* head leadership is more effective than either one alone. By nature, emotions and intellect are intricately woven together in the human brain. To acknowledge this reality is to acknowledge an unleashed potential in sustaining effective, resonant leadership. Emotional intelligence impacts leadership because "no creature can fly with just one wing. Gifted leadership occurs where heart and head—feeling and thought—meet. These are the two wings that allow a leader to soar" (Goleman et al., 2002, p. 26).

The significance of this study is also related to the underlying logical argument. McKay (2000) defines the features of a sound argument. A sound argument is valid and all of its premises are true. The valid argument presented earlier speaks to the significance of the study. If the premise is true, as Marzano et al. (2005) assert, that the 21 school leadership practices identified in their meta-analysis increase student achievement, and if there is a strong correlation between emotional intelligence and those 21 school leadership practices, then one could conclude that emotionally intelligent leadership will be related to increasing student achievement. If this valid argument were

sound, it would be in the best interest of school districts desiring to increase student achievement to hire and develop emotionally intelligent school leaders.

Finally, the significance of this study is related to understanding how emotionally intelligent school leaders are formed and what emotionally intelligent school leadership practice looks like from a craft perspective. Having this knowledge could help districts and school leaders influence the development of emotionally intelligent leadership. Having this knowledge could also help districts and school leaders replicate best practices exemplifying emotionally intelligent school leadership.

Contribution to Knowledge, Theory, and Practice

Determining if a relationship exists between emotional intelligence and research-based school leadership practices could provide a compelling case for hiring and developing emotional intelligence in school leaders. If competencies of emotional intelligence are strongly related to research-based school leadership practices, then seeking those competencies in the hiring process and developing those competencies in school principals could be related to increasing student achievement. Measures of emotional leadership intelligence and measures of engagement in research-based school leadership practices could be used as tools in the hiring protocols employed by school districts. Measures of emotional leadership intelligence and effective school leadership could be used in the professional development and evaluation of school leaders. As leaders become aware of the strengths and deficits in their own emotional intelligence and research-based school leadership practices, they would be able to leverage their strengths and mitigate weaknesses to increase their effectiveness as school leaders, thereby positively impacting the academic achievement of the students they serve.

Limitations and Delimitations of the Study

Several intentional boundaries were established for the purpose of this study. Only the emotional intelligence and research-based school leadership practices of principals were examined in this research. The research was conducted from September 2007 through August 2008. Only K-12 public school principals in the state of Wisconsin were sampled in the study. As a result, the quantitative findings in this study should only be generalized to the population from which the random sample was taken. The results from the qualitative phase of this study should not be generalized to the population of K-12 Wisconsin principals because the sample was limited in size and purposively selected.

Assumptions

The current study was based upon several assumptions. It was assumed the theoretical frameworks underpinning this study related to emotional intelligence and effective school leadership are sound based upon review of the literature. It was assumed that emotional intelligence exists, that leadership can affect student achievement, and that both emotional intelligence and school leadership can be measured. It was assumed the random sample studied was representative of the total population of Wisconsin K-12 public school principals and, therefore, the study results could be generalized to the whole population. Based upon the field studies conducted while developing the survey instrument, it was assumed that the self-report survey reliably measured both engagement in the 21 leadership practices that increase student achievement and emotional intelligence. Finally, it was assumed that participants in the study answered all survey and interview questions openly and honestly.

Timeframe

Approval from the Institutional Review Board of Cardinal Stritch University was obtained in July 2007. Electronic surveys were distributed in September 2007, and data were collected through December 2007. Follow-up interviews were scheduled and conducted from February 2008 through June 2008. Interviews were transcribed from July 2008 through October 2008. Quantitative and qualitative data collected in the multi-phase study were analyzed from January 2008 through December 2008.

Vocabulary of the Study

Emotional intelligence is a way of knowing that utilizes the emotional nature of the brain. Emotional intelligence is generally defined as the capacity to recognize and regulate emotions to enhance thinking (Mayer & Salovey, 1997). Emotional intelligence includes mental and emotional abilities, skills, and competencies that either hinder or enhance one's capacity to function productively in the social context of the world. Since Goleman et al., (2002) applied their theory specifically to the field of organizational leadership, their conceptual structure and related definitions were used for the purpose of this study. Specifically, emotional intelligence refers to the four domains of self-awareness, self-management, social awareness, and relationship management (Goleman et al., 2002). Competencies are those 19 subcategories within each of the four domains of emotional intelligence that describe specific skills to further define what emotional intelligence is: 1) emotional self-awareness, 2) accurate self-assessment, 3) self-confidence, 4) emotional self-control, 5) transparency, 6) adaptability, 7) achievement, 8) initiative, 9) optimism, 10) empathy, 11) organizational awareness, 12) service,

13) inspirational leadership, 14) influence, 15) developing others, 16) change catalyst, 17) conflict management, 18) building bonds, and 19) teamwork and collaboration. Table 1 provides specific definitions for each of the 19 competencies within the four domains of emotional intelligence.

Table 1

Definitions of Competencies in the Domains of Emotional Intelligence

Domains and Competencies	Definitions
Self-Awareness	
Emotional Self-Awareness	Reading one's own emotions and recognizing their impact; using "gut sense" to guide decisions
Accurate Self-Assessment	Knowing one's strengths and limits
Self-Confidence	A sound sense of one's self-worth and capabilities
Self-Management	
Emotional Self-Control	Keeping disruptive emotions and impulses under control
Transparency	Displaying honesty and integrity; trustworthiness
Adaptability	Flexibility in adapting to changing situations or overcoming obstacles
Achievement	The drive to improve performance to meet inner standards of excellence
Initiative	Readiness to act and seize opportunities
Optimism	Seeing the upside in events
Social Awareness	
Empathy	Sensing others' emotions, understanding their perspective, and taking active interest in their concerns
Organizational Awareness	Reading the currents, decision networks, and politics at the organizational level
Service	Recognizing and meeting follower, client, or customer needs
Relationship Management	
Inspirational Leadership	Guiding and motivating with a compelling vision
Influence	Wielding a range of tactics for persuasion
Developing Others	Bolstering others' abilities through feedback and guidance
Change Catalyst	Initiating, managing, and leading in a new direction
Conflict Management	Resolving disagreements
Building Bonds	Cultivating and maintaining a web of relationships
Teamwork/Collaboration	Cooperation and team building

Note. Adapted from Goleman et al. (2002), p. 39.

In this study, effective school leadership was defined as leadership that is

positively correlated to increased student achievement. This leadership was further

defined as a set of responsibilities or categories of behaviors that describe general

characteristics and specific practices that impact student achievement (Marzano et al.,

2005). The 21 leadership responsibilities that influence the overall achievement of

students identified are listed in Table 2. Table 2 also provides specific definitions for

each of these 21 leadership practices.

Table 2

Definitions of 21 School Leadership Responsibilities

Leadership Responsibility	Definition: The extent to which the principal…
1. Affirmation	Recognizes and celebrates school accomplishments and acknowledges failures
2. Change Agent	Is willing to and actively challenges the status quo
3. Communication	Establishes strong lines of communication with teachers and among students
4. Contingent Rewards	Recognizes and rewards individual accomplishments
5. Culture	Fosters shared beliefs and a sense of community and cooperation
6. Discipline	Protects teachers from issues and influences that would detract from their teaching time or focus
7. Flexibility	Adapts his or her leadership behavior to the needs of the current situation and is comfortable with dissent
8. Focus	Establishes clear goals and keeps those goals in the forefront of the school's attention
9. Ideals and Beliefs	Communicates and operates from strong ideals and beliefs about schooling
10. Input	Involves teachers in the design and implementation of important decisions
11. Intellectual Stimulation	Ensures that the faculty and staff are aware of the most current theories and practices and makes the discussion of these a regular aspect of the school culture
12. Involvement in Curriculum, Instruction, Assessment	Is directly involved in the design and implementation of curriculum, instruction, and assessment practices
13. Knowledge of Curriculum, Instruction, Assessment	Is knowledgeable about current curriculum, instruction, and assessment practices
14. Monitor and Evaluate	Monitors the effectiveness of school practices and their impact on student learning
15. Optimize	Inspires and leads new and challenging innovations
16. Order	Establishes a set of standard operating procedures and routines
17. Outreach	Is an advocate and spokesperson for the school to all stakeholders
18. Relationships	Demonstrates awareness of the personal aspects of teachers and staff
19. Resources	Provides teachers with materials and professional development necessary for the successful execution of their jobs
20. Situational Awareness	Is aware of the details and the undercurrents in the running of the school and uses this information to address current and potential problems
21. Visibility	Has quality contacts and interactions with teachers and students

Note. Adapted from Marzano et al. (2005), pp. 42-43.

Summary and Forecast

This introductory chapter presented an overview of the study through description of the background, purpose, approach, significance, limitations and delimitations, assumptions, timeframe, and vocabulary of the research study described. Chapter Two defines the theoretical foundation of the study through a comprehensive review of literature related to the research questions listed in Chapter One. Chapter Three describes the research design used to conduct the study, specifically the research methodology and technique applied to data collection and analysis. Chapter Four presents the results of the study in the form of data generated and analyzed through application of the research design. Chapter Five presents a discussion of study findings and conclusions related to the research questions and reviewed literature. This concluding chapter also addresses the recommendations for practice and further research related to leadership, learning, and service.

CHAPTER TWO: LITERATURE REVIEW

Organization of Review

The purpose of this study was to determine if a relationship exists between emotional intelligence and research-based school leadership behaviors that increase student achievement. The research questions were:

1. Is there a relationship between emotional intelligence and research-based school leadership practices that have been identified to increase student achievement?

2. If so, what specific research-based school leadership practices have the strongest positive correlations to each of the emotional intelligence competencies?

3. What insights can school leaders, who demonstrate high levels of emotional intelligence and engagement in research-based school leadership, provide into their formation as leaders and their leadership practice?

This chapter reviews literature addressing research and theory related to the study in the areas of emotional intelligence, effective school leadership, emotional intelligence as it relates to leadership, emotional intelligence as it relates to organizational effectiveness, and emotional intelligence as it relates to schools and effective school leadership. A summary analysis of prominent themes and findings within the reviewed literature is presented at the end of the chapter.

Review of Research and Theory About Emotional Intelligence

Emotional Intelligence Defined

Despite the fact that the study of emotional intelligence is relatively new, definitions and theorists seeking to describe emotional intelligence abound. In his work describing multiple intelligences, Gardner (1983) described intrapersonal and interpersonal intelligences, which seem to be closely related to aspects of what later came to be known as emotional intelligence. A decade later, Mayer and Salovey (1993) were defending emotional intelligence as an intelligence related to, but distinct from, social intelligence as described by E. L. Thorndike (1920). Mayer, DiPaolo, and Salovey (1990) stated "emotional intelligence involves the accurate appraisal and expression of emotions in oneself and others and the regulation of emotion in a way that enhances living" (p. 772). Cooper (1997) described four cornerstones of emotional intelligence: 1) emotional literacy, 2) emotional fitness, 3) emotional depth, and 4) emotional alchemy. Weisinger (1998) portrayed emotional intelligence as the "intelligent use of emotions: you intentionally make your emotions work for you by using them to help guide your behavior and thinking in ways that enhance your results" (p. xvi).

McCallum and Piper (2000) defined emotional intelligence as "a general construct encompassing emotional, personal, and social abilities that influence one's overall capability to effectively cope with environmental demands and pressures" (p. 123). Lane (2000) defined emotional intelligence as "the ability to use emotional information in a constructive and adaptive manner" (p. 171). Kunnanatt (2004) explained emotional intelligence as "the sum total of the mental capabilities that enable a person in understanding his or her own and others' emotions correctly, in real time, and in using

these emotions intelligently to produce personally and socially desirable transactional outcomes" (p. 490). A common theme present within the numerous definitions and descriptions of emotional intelligence is the human ability to use the emotional capacity of the brain to live, work, and relate more effectively in a social world.

For the purpose of the present study, the researcher used the theoretical framework proposed by Goleman et al. (2002) to describe emotional intelligence. In this framework, emotional intelligence is defined within four domains: 1) self-awareness, 2) self-management, 3) social awareness, and 4) relationship management. Each domain is divided into a series of competencies that further delineate the essence of each domain. The domains of self-awareness and self-management address an individual's personal competence. The domains of social awareness and relationship management address an individual's social competence.

Self-awareness

In the model of emotional intelligence proposed by Goleman et al. (2002), self-awareness includes three personal competencies: 1) emotional self-awareness, 2) accurate self-assessment, and 3) self-confidence. Self-awareness is the ability to honestly reflect on and understand one's emotions, strengths, challenges, motives, values, goals, and dreams. Well-respected authors on leadership speak to the importance of being self-aware (Heifetz & Linsky, 2002; Kouzes & Posner, 2002; Lipman-Blumen, 2005; Palmer, 2000; Wheatley, 2002). Self-awareness provides the foundation on which the other three domains (self-management, social awareness, relationship management) build. Without first adequately knowing and understanding self, it is difficult to manage one's emotions, accurately assess emotions in others, or to use that information to manage one's

relationships with others. These competencies enable a leader to be conscious of personal limitations and use personal strengths to further the work of achieving organizational goals.

Self-management

Self-management encompasses six personal competencies: 1) emotional self-control, 2) transparency, 3) adaptability, 4) achievement, 5) initiative, and 6) optimism. According to Goleman et al. (2002), self-management is equated to an ongoing inner conversation and "is the component of emotional intelligence that frees us from being a prisoner of our feelings. It's what allows the mental clarity and concentrated energy that leadership demands, and what keeps disruptive emotions from throwing us off track" (p. 46). Without effective self-management, it is difficult to reach one's personal goals and dreams let alone to lead an organization to realizing its goals and dreams. Managing one's emotions and being open to others about one's feelings, beliefs, and actions helps to establish trust, integrity, and personal capital. These are key ingredients in developing healthy working relationships and a culture and climate that is conducive to furthering the work of organizational leadership.

Social Awareness

Social awareness is comprised of three social competencies: 1) empathy, 2) organizational awareness, and 3) service. Social awareness is being acutely aware of the emotions and needs of others. Goleman et al. (2002) note the following:

> By being attuned to how others feel in the moment, a leader can say and do
> what's appropriate—whether it be to calm fears, assuage anger, or join in good

spirits. This attunement also lets a leader sense the shared values and priorities

that can guide the group. (p. 49)

Social awareness allows a leader to monitor and adjust strategy, direction, and work

toward accomplishing a shared vision. It helps a leader know when to push and capitalize

on the momentum of the group and when to pull back and encourage reflection and

collective re-examination of purpose and priorities.

Relationship Management

Relationship management involves seven social competencies: 1) inspirational

leadership, 2) influence, 3) developing others, 4) change catalyst, 5) conflict

management, 6) building bonds, and 7) teamwork and collaboration. Relationship

management stems from the domains of self-awareness, self-management, and social

awareness allowing the emotionally intelligent leader to effectively manage emotions

perceived in others. "Relationship skills allow leaders to put their emotional intelligence

to work" (Goleman et al., 2002, p. 52). In the leadership setting, relationship management

is building rapport and nurturing the capacity in others to share leadership. Relationship

management is cultivating webs of relationships, finding common ground, and using

shared vision to motivate people to move forward toward accomplishing a mission or

goal.

The Role of the Brain in Emotional Intelligence

The brain plays an important role in thinking and feeling (Damasio, 1994;

Damasio, 1999; Dickmann & Stanford-Blair, 2002; LeDoux, 1996; Pert, 1997). Recent

advances in brain-imaging technologies are making "visible for the first time in human

history what has always been a source of deep mystery: exactly how this intricate mass of

cells operates while we think and feel, imagine and dream" (Goleman, 2005, p. xxi). We have a thinking mind and a feeling mind and, although they function semi-independently from one another, they are also interconnected and linked in the brain's complex circuitry (Goleman, 2005).

Similar to embryonic development, the brain has evolved over time. The most primitive part of the brain is the brainstem, which is located at the top of the spinal chord. This part of the brain controls the regulation of basic life functions like respiration and digestion. The top part of the brainstem is the limbic system, which was the next area of the brain to develop. The limbic system contains the emotional brain and the powerful amygdala. The neocortex is the complex thinking brain and the center for rational thought (Goleman, 2005; Goleman et al., 2002).

Understanding the basic design of the human brain provides insights into the role the brain plays in emotional intelligence and underpins the recognition of the evolving capacity needed in developing leaders. As powerful as the complex thinking part of the brain is, it does not always reign supreme:

These higher centers [neocortex] do not govern all of emotional life; in crucial matters of the heart—and most especially in emotional emergencies—they can be said to defer to the limbic system. Because so many of the brain's higher centers sprouted from or extended the scope of the limbic areas, the emotional brain plays a crucial role in neural architecture. As the root from which the new brain grew, the emotional areas are intertwined via myriad connecting circuits to all parts of the neocortex. This gives the emotional centers immense power to influence the

functioning of the rest of the brain—including the centers for thought. (Goleman,

2005, p. 12)

In order to ensure survival, the amygdala is capable of taking over the rational brain, at

least temporarily, if it perceives a threat. This means the emotional centers of the brain

can initiate a response (fight, flight or freeze, for example) before the rational brain has

determined whether or not the response is the best one. Joseph LeDoux's brain research

revealed how,

the architecture of the brain gives the amygdala a privileged position as an

emotional sentinel, able to hijack the brain. . . .[S]ensory signals from eye or ear

travel first in the brain to the thalamus, and then—across a single synapse—to the

amygdala; a second signal from the thalamus is routed to the neocortex—the

thinking brain. This branching allows the amygdala to begin to respond *before* the

neocortex, which mulls information through several levels of brain circuits before

it fully perceives and finally initiates its more finely tailored response. (Goleman,

2005, p. 17)

This is the reason why self-awareness and self-management are such critical domains of

competence in emotional intelligence. Goleman (2005) goes on to point out:

The brain's damper switch for the amygdala's surges appears to lie at the other

end of a major circuit to the neocortex, in the prefrontal lobes just behind the

forehead. The prefrontal cortex seems to be at work when someone is fearful or

enraged, but stifles or controls the feeling in order to deal more effectively with

the situation at hand. . . .The neocortical area of the brain brings a more analytic

or appropriate response to our emotional impulses, modulating the amygdala and

other limbic areas. (pp. 24-25)

The research suggests an important link between rational thought and feeling and how the

two minds influence one another. Goleman (2005) summarized:

In the dance of feeling and thought the emotional faculty guides our moment-to-

moment decisions, working hand-in-hand with the rational mind, enabling—or

disabling—thought itself. Likewise, the thinking brain plays an executive role in

our emotions—except in those moments when emotions surge out of control and

the emotional brain runs rampant. (p. 28)

Related Research

The hypothesis that the amygdala and somatosensory cortices in the brain play a

critical role in the decision making and reasoning processes has been confirmed by

researchers (Bechara, Tranel, & Damasio, 2000). In gambling task experiments, subjects

were rewarded or punished financially as a result of drawing cards from one of four

decks of cards. Although the cards in decks A and B offered higher financial rewards,

they also contained higher financial risks. The cards in decks C and D offered both low

financial rewards, but also low financial risks. Normal subjects learned to avoid decks A

and B and preferred the safer, good decks (C and D). Subjects with damage to their

brains, specifically, those with ventromedial lesions did not avoid the higher risk and bad

decks and actually preferred them. From this study, Bechara et al. (2000) concluded that

previous emotional experiences normally come in to play when making a decision.

Whether at the level of conscious or subconscious thought, emotions provide the "go,

stop, and turn signals needed for making advantageous decisions" (p. 195).

Damasio (1994) points to the necessary integration of brain systems in reasoning and decision-making:

> One might say, metaphorically, that reason and emotion "intersect" in the ventromedial prefrontal cortices, and that they also intersect in the amygdala. . . . in short, there appears to be a collection of systems in the human brain consistently dedicated to the goal-oriented thinking process we call reasoning, and to the response selection we call decision making, with a special emphasis on the personal and social domain. This same collection of systems is also involved in emotion and feeling, and is partly dedicated to processing body signals. (p. 70)

Healthy decision-making processes then are positively impacted by healthy brains which are able to draw from, and process, prior emotional experiences in intelligent ways.

Additionally, emotional intelligence has been found to have an impact on the physical health of individuals. Taylor and Bagby (2000) found that patients with a condition known as alexithymia or the lack of ability to verbalize their feelings often experienced resulting health issues with substance abuse, eating disorders, stress disorders, high blood pressure, and gastrointestinal disorders. Even individuals without such dramatic medical conditions, but who are nonetheless weak in identifying, communicating, and managing their emotions can suffer negative effects including anxiety, depression, substance abuse, thoughts of suicide, and can be more susceptible to disease (Bradberry & Greaves, 2005). Bradberry and Greaves note "stress, anxiety, and depression suppress the immune system, creating a vulnerability to everything from the common cold to cancer" (p. 49).

Practicing emotional intelligence can counteract the potential negative effects of mismanaged emotions (Bradberry & Greaves, 2005; Cooper, 1997). "Emotional intelligence skills strengthen your brain's ability to cope with emotional distress. This resilience keeps your immune system strong and helps protect you from disease" (Bradberry & Greaves, 2005, p. 51). Cooper (1997) points out that individuals who are emotionally intelligent enjoy more success in their careers, establish and maintain healthier relationships with other people, lead in more effective ways, and benefit from better health.

Measuring Emotional Intelligence

Emotional intelligence can be measured, and such measurement is approached in one of three ways (Mayer, Caruso, & Salovey, 2000). The first approach takes the form of a self-report measure. Information yielded from self-report measures reflects an individual's self-concept more than their actual level of emotional intelligence. A possible limitation of self-report measures is they may yield inaccurate self-assessment of actual abilities or competencies. A second approach to measuring emotional intelligence involves informant measures. Informant measurement approaches yield information regarding how others perceive an individual. A possible limitation of this approach is that it is a measure of an individual's reputation, not necessarily an accurate measure of that individual's actual abilities or competencies. A third approach involves ability or performance measures. For example, to assess how well people perceive emotions in others, they might be shown faces of people who are experiencing various emotions and asked to identify the emotion being experienced. Ability and performance measures are preferred by some researchers (Mayer et al., 2000).

Several validated assessment tools are mentioned in the literature. The Mayer Salovey Caruso Emotional Intelligence Test (MSCEIT) measures emotional intelligence as an array of abilities: perceiving emotions, facilitating thought, understanding emotions, and managing emotions. The MSCEIT provides an overall emotional intelligence score as well as subscale scores for perception, facilitation, understanding, and management.

The Emotional Quotient Inventory (EQ-i), designed by Dr. Reuven Bar-On, measures emotional intelligence as an array of non-cognitive skills on five composite scales and 15 sub-scales. The five composite scales and corresponding sub-scales are as follows: 1) intrapersonal (self-regard, emotional self-awareness, assertiveness, independence, self-actualization), 2) interpersonal (empathy, social responsibility, interpersonal relationship), 3) adaptability (reality testing, flexibility, problem solving), 4) stress management (stress tolerance, impulse control), and 5) general mood (optimism, happiness).

The Emotional Competency Inventory (ECI) is a 360-degree feedback tool in which the person being assessed receives feedback from his or her boss, peers, and subordinates. This instrument was recently revised and is available through the Hay Group as the Emotional and Social Competency Inventory (ESCI 3.0). Also, a 360-degree instrument, this inventory measures an individual's competencies in the four domains and 19 competencies that Goleman (1998) developed.

Cooper (1997) developed two tools to measure emotional intelligence, the EQ Map and Organizational EQ Map Profiles. Both tools are available through Q-Metrics company of San Francisco. The EQ Map and Map Profiles provide feedback on five attributes of emotional intelligence: 1) current environment (life pressures and life

satisfaction), 2) emotional literacy (self-awareness, expression, and awareness of others), 3) EQ competencies (intentionality, creativity, resilience, interpersonal connections, and constructive discontent), 4) EQ values and attitudes (outlook, compassion, intuition, trust radius, personal power, and integrated self), and 5) outcomes (general health, quality of life, relationship quotient, and optimal performance).

In addition to these formal measures of emotional intelligence, a search of the Internet produces links to available on-line surveys (Brusman, 2004; Rock, n.d). These on-line surveys allow a person to respond either yes or no or rank oneself on a scale; scoring guides are provided at the end of the surveys. The validity and reliability of these measures are not addressed and, therefore, are not appropriate for use in formal research.

Other powerful measures of emotional intelligence involve qualitative measures: observations, site visits, and interviews. Just as one can glimpse insights into a person's intellectual capacity from observation, so too, can one make observations about a person's emotional abilities and competencies by seeing that person performing their job within the organization. Listening to conversations in any organization can provide keen indications to the overall quality of the culture and climate and of who is, and who is not, "think-smart" and "feel-smart." Such qualitative measures can provide rich, thick description of emotional intelligence, especially as it relates to leadership. As with any measures used for research purposes, measures of emotional intelligence need to be used carefully and be triangulated with other sources of data (Leedy & Ormrod, 2005; Salkind, 2006).

Developing Emotional Intelligence

Considering the level of consensus in the literature on the importance of emotional intelligence, it is encouraging to see a corresponding consensus that emotional intelligence can be learned and strengthened in individuals and groups (Cherniss, 1998, 2000; Cooper, 1997; Dearborn, 2002; Kunnanatt, 2004; Lynn, 2005; O'Neal, 1996; Scarfe, 2000; Taylor & Bagby, 2000). Development of emotional intelligence is influenced in early childhood as young children interact with parents and caregivers (Taylor & Bagby, 2000). Young brains are especially malleable and it is in childhood where emotional health begins to take root and should be consciously taught (O'Neal, 1996). Scarfe (2000) notes that "learning to accurately express, recognize, and understand emotional expressions is an important developmental task for infants and children. Children use emotional knowledge to guide them through the social world" (p. 244).

While opportunities for emotional intelligence to take root are most abundant in childhood, individuals are never too old to improve their emotional intelligence. The sooner one learns to improve emotional intelligence, the sooner one can enjoy and experience its benefits (O'Neal, 1996). Goleman et al. (2002) support this by contending that emotional intelligence competencies "are not innate talents, but learned abilities, each of which has a unique contribution to making leaders more resonant, and therefore more effective" (p. 38). Thus, it is recommended that programming related to emotional intelligence be included routinely in training and development programs (Rozell, Pettijohn, & Parker, 2001).

Not all training programs aimed at increasing emotional intelligence are effective, however. Effective training programs will have sustainable impact when they are

conducted in emotionally safe, encouraging environments, where participants want to improve their abilities and set manageable goals, where participants are actively involved in experiences to strengthen emotional intelligence, where they are coached and given feedback when practicing new skills, and where there is continuing follow-up planned and implemented by supportive leadership (Cherniss, 1998, 2000; Dearborn, 2002; Kunnanatt, 2004).

Review of Research and Theory about Effective School Leadership

If theories and definitions regarding emotional intelligence abound, then theories and definitions regarding effective school leadership abound abundantly! Schmoker (1999) writes about the need for leaders to have a laser-like focus on results and use of data to improve student achievement. Cherniss (1998) states the following traits are necessary for effective school leadership: self-confidence, the ability to modulate emotions, motivation and persistence, persuasiveness, initiative, achievement orientation, and the ability to cultivate positive relationships. Catano and Stronge (2006) claim for school leaders to meet both the internal and external demands placed upon them, they need to be strong in "instructional leadership, organizational management, and community relations" (p. 221). Saphier, King, and D'Auria (2006) state "strong organizational cultures produce the best results for children, especially children who are disadvantaged and behind grade level" (p. 51).

The standards for school leaders articulated by the Interstate School Leaders Licensure Consortium (Council of Chief State School Officers, 1996) stress that building a shared vision, a school culture focused on student and staff growth, and relationships with families and communities are critical to student success. The standards also

articulate that effective school leaders manage well the daily operations of a school, act with integrity in ways that are fair and ethical, and work to influence the larger political, social, and cultural context beyond the school walls (Murphy, 2001). Furtwengler and Furtwengler (1998) concur and add financial management, long-range planning, media relations, and staff development to the list of needed skills for effective school leaders. These theorists seem to agree that, given the context of increasing accountability for student performance, the task of school leadership has moved beyond issues related to the operation of a school facility into the realm of creating and sustaining impactful change (Fullan, 2003).

Marzano et al. (2005) begin chapter two of their book, *School Leadership That Works*, with a brief review of the prominent theories about effective leadership including Burns's and Bass's transformational and transactional leadership models, Leithwood's transformational model of school leadership, Deming's total quality management principles, Greenleaf's servant leadership framework, Hersey and Blanchard's situational leadership model, Smith and Andrew's views on instructional leadership, Bennis's work on leadership for the twenty-first century, Block's framing of leadership as the process of conversation and effective questioning, Collin's work on good to great leaders, Covey's seven habits and principle-centered leadership viewpoints, Elmore's beliefs in distributed leadership, Fullan's work related to what kind of leadership will produce deep, sustainable change, Heifetz and Linsky's views on situational leadership.

What Marzano et al. (2005) argue, however, is that all this theory on effective leadership and effective school leadership, specifically, is not enough. Moreover, they found conflicting reports regarding the impact school leaders actually have on student

achievement ranging from no impact to some impact to significant impact. Their work focused on research conducted over the past 35 years to identify leadership practices that impact student achievement.

In contrast to Kathleen Cotton's work (2003) which reviewed 81 research reports and analyzed them from a narrative perspective, Marzano et al. (2005) chose to do a meta-analysis to review and analyze the evidence of the impact of school leadership through a quantitative lens. They reviewed 69 studies involving 2,802 schools, 1.4 million students, and 14,000 teachers and determined the average correlation between school principal leadership behavior and average student achievement to be .25. In other words, given a principal in a school with average achievement (at the 50th percentile), by increasing that principal's ability to lead effectively by one standard deviation (from the 50th percentile to the 84th percentile), one could expect the academic level at which those students would achieve would be raised from the 50th percentile to the 60th percentile. Increasing the principal's skills from the 50th to the 99th percentile would translate into gains for students from the 50th percentile to the 72nd percentile. Marzano et al. concluded that "a highly effective school leader can have a dramatic influence on the overall academic achievement of students" (p. 10).

Marzano et al. (2005) identified 21 categories of leadership practices that they refer to as leadership responsibilities. The average correlation between the leadership practice and student academic achievement for each of the categories or responsibilities ranged from .18 to .33. The number of research studies analyzed for each leadership responsibility category ranged from four to 44. Table 3 lists each leadership

responsibility tied to gains in student achievement and the average correlation from the studies in the meta-analysis.

Table 3

Average Correlations for 21 School Leadership Responsibilities

Leadership Responsibility	Average Correlation to Student Achievement
Affirmation	.19
Change Agent	.25
Communication	.23
Contingent Rewards	.24
Culture	.25
Discipline	.27
Flexibility	.28
Focus	.24
Ideals and Beliefs	.22
Input	.25
Intellectual Stimulation	.24
Involvement in Curriculum, Instruction, and Assessment	.20
Knowledge of Curriculum, Instruction, and Assessment	.25
Monitor and Evaluate	.27
Optimize	.20
Order	.25
Outreach	.27
Relationships	.18
Resources	.25
Situational Awareness	.33
Visibility	.20

Note. Adapted from Marzano et al. (2005), p. 39.

Though their methodological approaches were quite different, there are similarities between Cotton's findings (2003) and the findings of Marzano et al. (2005) as evidenced by Table 4. For purposes of the current research study, the leadership responsibilities identified by Marzano et al. provided the theoretical framework defining effective, research-based school leadership practices.

Table 4

Comparison of Categories of Principal Behavior (Cotton) and School Leadership Responsibilities (Marzano, Waters, & McNulty)

Categories of Principal Behavior (Cotton)	Leadership Responsibilities (Marzano et al.)
1. Safe and Orderly School Environment	Order
2. Vision and Goals Focused on High Levels of Student Learning	Focus, Optimizer
3. High Expectations for Student Learning	Focus
4. Self-Confidence, Responsibility, Perseverance	Ideals/Beliefs, Optimizer
5. Visibility and Accessibility	Input, Visibility
6. Positive and Supportive School Climate	Culture
7. Communication and Interaction	Communication, Relationship
8. Emotional and Interpersonal Support	Relationship, Visibility
9. Parent and Community Outreach and Involvement	Outreach
10. Rituals, Ceremonies, Other Symbolic Actions	Contingent Rewards, Affirmation
11. Shared Leadership, Decision Making, Staff Empowerment	Input, Communication
12. Collaboration	Culture
13. Instructional Leadership	Knowledge of Curriculum, Instruction, and Assessment, Involvement in Curriculum, Instruction, and Assessment
14. Ongoing Pursuit of High Levels of Student Learning	Focus, Optimizer
15. Norm of Continuous Improvement	Focus, Intellectual Stimulation
16. Discussion of Instructional Issues	Intellectual Stimulation
17. Classroom Observation and Feedback to Teachers	Monitoring/Evaluating, Involvement in Curriculum, Instruction, and Assessment
18. Support of Teachers' Autonomy	Flexibility
19. Support of Risk Taking	Change Agent
20. Professional Development Opportunities and Resources	Resources
21. Protecting Instructional Time	Discipline
22. Monitoring Student Progress and Sharing Findings	Monitoring/Evaluating, Focus
23. Use of Student Progress Data for Program Improvement	Monitoring/Evaluating
24. Recognition of Student and Staff Achievement	Contingent Rewards, Affirmation
25. Role Modeling	Knowledge of Curriculum, Instruction, and Assessment, Involvement in Curriculum, Instruction, and Assessment

Though the two studies took different approaches to research, Cotton's findings regarding

school leadership practices that raise student achievement validate the findings of

Marzano et al.

<div align="center">Review of Research and Theory About Emotional</div>

<div align="center">Intelligence as it Relates to Leadership</div>

Research into the relationship between emotional intelligence and leadership is in

its infancy, and new studies are emerging on a regular basis showing positive links

between emotional intelligence and leadership performance outcomes (Higgs & Aitken,

2003; Scott-Ladd & Chan, 2004). Dulewicz and Higgs (2003) conducted research in the

United Kingdom and found that emotional intelligence competencies in board members

were considered to be extremely important to the directors serving under them. Barbuto

and Burbach (2006) found a link between emotional intelligence and transformational

leadership. In their study of 80 elected officials in the United States and three to six direct

reports of each official, they found the "emotional intelligence of the leaders shared

significant variance with self-perceptions and rater-perceptions of transformational

leadership" (p. 51). Barling, Slater, and Kelloway (2000) studied 57 managers in Canada

and also found emotional intelligence was associated with three aspects of

transformational leadership: 1) idealized influence, 2) inspirational motivation, and

3) individualized consideration. Gardner and Stough (2002) surveyed 110 high level

managers and also uncovered a strong relationship ($r = 0.68$) between transformational

leadership and emotional intelligence.

In addition to the formal research that has started, there is ever-increasing

comment in the literature either directly or indirectly connecting emotional intelligence

and leadership in general. Peter Drucker (1999) wrote about the importance of knowing one's strengths and weaknesses, of managing and developing oneself, of knowing the strengths and values of coworkers, and of taking responsibility for maintaining positive, productive relationships with others. Though Drucker does not use the term "emotional intelligence," his beliefs about effective leadership are directly aligned to the domains of emotional intelligence: self-awareness, self-management, social awareness, and relationship management (Goleman et al., 2002).

Emotional intelligence in leadership is first about personal competence—of knowing one's emotional self and managing that self well. Numerous researchers and authors speak to the importance of leaders knowing who they are and who they are not, what they value, and what they will go to the wall for (Badaracco, 2002; Collins, 2001; Heifetz & Linsky, 2002; Kouzes & Posner, 2002; Maxwell, 1999; Pellicer, 2003; Starratt, 2004; Wheatley, 1999). Saarni (2000) writes about leadership as character: "character lies at the heart of a balanced life that is well-lived. . . . such a balanced, well-lived life, characterized by personal integrity, is one that reflects mature emotional competence" (p. 72). Badaracco (2002) writes about the quiet virtues of restraint, modesty, and tenacity. Collins (2001) notes that Level 5 leadership, which he considers great leadership, requires a blend of "extreme personal humility with intense professional will" (p. 20).

Emotional intelligence in leadership is also about social competence—of knowing others' emotional selves and managing the relationships between self and others well. Heifetz and Linsky (2002) reference the three virtues of sacred heart—innocence, curiosity, and compassion. Block (2003) encourages leaders to be curious and converse

with others about what really matters. Dearborn (2002) articulates social competence in this way: "The resonant leader, one who can inspire, motivate, arouse commitment and sustain it, will constantly strengthen and fine-tune his/her EI competencies and move fluidly between different leadership styles, flexing to meet the needs of the situation" (p. 525).

Emotional intelligence is about blending personal and social competence to lead—to influence others toward the achievement of a goal. Scott-Ladd and Chan (2004) argue that emotionally intelligent leaders are best able to understand their emotional responses and change them if necessary. They are also best able to read situations and people around them and then use this knowledge to problem-solve and make better decisions. Kunnanatt (2004) confirms this stating,

> instead of denying emotions, during emotional navigation individuals slow down their reactions to give intellect a chance to guide emotions. When in conflict or crisis, this slowing-down process helps in carefully engaging both heart and mind, and thus generates creative and intellectually superior solutions. (p. 494)

Dearborn (2002) concurs stating that "effective leaders are those who develop a range of EI competencies, can assess situations intuitively, make sound choices about what is most needed by individuals and the group in a multitude of situations, and then deliver" (p. 524).

Emotionally intelligent leaders invest in themselves as leaders—by being aware of their emotions and by managing their emotions well. They are attuned to the emotional states of others around them. They recognize and reward commendable follower behavior. Emotionally intelligent leaders develop emotional intelligence in others and

provide opportunities for followers to engage in meaningful, self-directed work. They cultivate healthy relationships to work through conflict that inevitably comes with change and motivate others toward achieving desired goals (Beecham & Grant, 2003; Dearborn, 2002). As Fullan (2001) notes, "effective leaders work on their own and others' emotional development. There is no greater skill needed for sustainable improvement" (p. 74).

Emotional intelligence is a powerful aspect of effective leadership. Cooper (1997) summarizes the critical importance of emotionally intelligent leadership this way:

Each aspect of emotional intelligence becomes a tributary. The more tributaries you open, the more powerful the force of their combined flow. At their strongest, the forces of emotional intelligence put you in tune with your deepest, natural understanding so that your thoughts and actions integrate all you have known, all you are, and all that you might become. That is called *confluence*—the drawing together of your disparate talents, purposes, and capabilities into an indivisible whole. (p. 38)

Review of Research and Theory about Emotional Intelligence as it

Relates to Organizational Effectiveness

Emotional intelligence in leadership impacts the performance of individual leaders; it also impacts organizational performance (George, 2000). Emotional intelligence is critical in the workplace as Bradberry and Greaves (2005) point out:

The intensity and variety of emotions that can surface over the course of a day are astounding. . . .People experience an average of 27 emotions each waking hour. With nearly 17 waking hours each day, you have about 456 emotional

experiences from the time you get up until the time you go to bed. This means

that more than 3,000 emotional reactions guide you through each week and more

than 150,000 each year! Of all the emotions you will experience in your lifetime,

nearly two million of them will happen during working hours. It's no wonder that

people who manage emotions well are easier to work with and more likely to

achieve what they set out to do. (pp. 120-121)

Leaders have the position power to create resonance or dissonance within the

whole organization just with their emotional demeanor (Goleman et al., 2002). Leaders

who are aware of, and manage, their emotions well develop positive moods that are

infectious in the workplace. Goleman et al. write that

executives' moods and behaviors are potent drivers of business success and affect

the moods and behaviors of people around them. . . .Emotional intelligence travels

through an organization like electricity through wires. . . .In other words, a

leader's mood can be literally contagious, spreading quickly throughout the

organization. (p. 42)

Lynn (2005) points out there is a connection among feelings, behavior, and performance.

Other people's feelings influence us and our feelings influence us in terms of our ability

to do our work. Leaders who lead with emotional intelligence create resonance that

brings out the best in everyone within the organization.

Employees cannot thrive and be their most productive in toxic environments

(Lipman-Blumen, 2005). Scott-Ladd and Chan (2004) comment that lower emotional

intelligence breeds negativity in the workplace and that higher levels of emotional

intelligence breed positive interpersonal relations with others in the workplace.

Employees within an organization may actually choose to leave or stay with a company depending on the emotional intelligence of leadership within the organization (Beecham & Grant, 2003; Goleman et al., 2002; Lipman-Blumen, 2005). Beecham and Grant (2003) state "the employee sees the company through the lens of the relationship she/he has with the supervisor. . . .For the most part, unhappy employees do not leave companies—they leave bosses" (p. 3).

Emotional intelligence within an organization also impacts the bottom line financially. Research by Bryant (2000) showed a positive relationship between emotional intelligence and sales. Cooper (1997) notes "research shows that emotions, properly managed, can drive trust, loyalty, and commitment—and many of the greatest productivity gains, innovations, and accomplishments of individuals, teams, and organizations" (p. 31). Bradberry and Greaves (2005) agree: "Organizations as a whole also benefit from emotional intelligence. When the skills of thousands of people in a single company are increased, the business itself leaps forward. Emotional intelligence skills drive leadership, teamwork, and customer service" (p. 53). Additionally, emotionally intelligent leadership is leadership that yields the greatest returns in employee satisfaction, employee retention, employee performance, and, in the business world, profitability (Beecham & Grant, 2003; Goleman, Boyatzis, & McKee, 2001; Holt & Jones, 2005).

Emotional intelligence is critical for leadership and for development throughout the organization. Weisinger (1998) comments, "a work organization is an integrated system that depends upon the performance of each individual who is a part of it and on the interrelationship of the individuals" (p. 212). People in organizations must work

together and social competencies in emotional intelligence impact the productivity and accomplishment of organizational goals, including the ability of teams to work through conflict. Druskat & Wolff (2001) believe "high EI is at the heart of effective teams" (p. 80). Dearborn (2002) adds that increases in accountability and the need for companies to do more with less require high interdependency and teamwork. Emotional intelligence is not just something leaders should strive for, but all members of an organization should strive to increase their level and practice of emotional intelligence. Weisinger (1998) comments about

> the value of using our emotional intelligence both in how we conduct ourselves and in how we relate to other. This is all building toward—and we should all be striving for—the emotionally intelligent organization, a company in which the employees create a culture that continuously applies the skills and tools of emotional intelligence. (p. 212)

Cherniss (2000) agrees that organizations should work to enhance both individual and organizational emotional intelligence remarking that the workplace is,

> a logical setting for efforts to improve the competencies associated with emotional intelligence. First, such competencies are critical for effective performance in most jobs. . . . In leadership positions, almost 90 percent of the competencies necessary for success are social and emotional in nature. . . .Second, workplace interventions to improve emotional intelligence are necessary because many adults now enter the world of work without the necessary competencies. . . . Third, workplace interventions make sense because many employers already have the means and the motivation for providing the necessary training

experiences. . . .[Fourth] most adults spend more of their waking hours at work

than any other place. (pp. 433-434)

Organizations would be wise to put emotional intelligence to work. Andreas Renschler,

CEO and President of Mercedes-Benz, encourages leaders to bring out the best talents

throughout the organization commenting that "emotional intelligence is to an executive

as sonar is to a ship, helping to steer clear of problem areas that can't otherwise be seen"

(Ryback, 1998, p. xvii). Ryback also views emotional intelligence in organizations as a

strength.

Emotional intelligence is far from weakness. It derives from our inner strength

which, when joined to a sensitive heart, makes for real character. Putting

emotional intelligence to work is more than a flight of fantasy for corporate

America. It's the most effective way to get more productive results in today's

extremely competitive marketplace. (p. 24)

Review of Research and Theory about Emotional Intelligence as it

Relates to Schools and Effective School Leadership

Connections have been made between emotional intelligence and effective school

leadership (Beatty, 2000; Bloom, 2004; Calderin, 2005; Johnson, Aiken, & Steggerda,

2005; Sachs & Blackmore, 1998). Cherniss (1998) remarks "increasingly, schools are

providing students with opportunities for social and emotional learning. We must be

equally concerned with the social and emotional learning of our school leaders" (p. 28).

Cherniss also states "self-confidence, the ability to modulate emotions, persuasiveness,

and initiative are some of the competencies of successful school principals. Effective

leaders are also good at cultivating positive relationships" (p. 26). In addition to building

working relationships, Cherniss calls on school leaders to become "mediators and mentors, negotiators and networkers" (p. 26).

Emotional intelligence may be a factor distinguishing excellence from ordinary as related to school leadership. Williams (2004) studied a criterion sample of 12 outstanding principals and eight typical principals in a large, midwestern school district. She found that outstanding principals demonstrated more of the emotional intelligence competencies than typical principals, including self-confidence, self-control, achievement, initiative, organizational awareness, developing others, influence, change catalyst, conflict management, and teamwork and collaboration.

Goleman (2006) comments about the importance of emotional intelligence in school leaders:

> The essential task of a school leader comes down to helping people get into and stay in an optimal state in which they can work to their best ability. This typically means creating an atmosphere of warmth and trust—of global rapport—in which people feel good about themselves, energized about their mission, and committed to giving their finest. (p. 80)

Goleman goes on to write that "the person-to-person climate created by positive interactions can make principals more effective leaders—which in turn helps both teachers and students learn better" (p. 76). Fall (2004) concurs finding, in her correlational study of 31 principals and 299 teachers, that both teachers and principals agree emotionally intelligent principals are likely to lead schools that are considered to be effective.

Fullan (2002) believes the emotional intelligence of school leaders must be improved for schools "to accomplish sustainable reform. This is reculturing of the highest order" (p. 15). Fullan identified five components that effective leaders share: "a strong sense of moral purpose, an understanding of the dynamics of change, an emotional intelligence as they build relationships, a commitment to developing and sharing new knowledge, and a capacity for coherence making" (p. 14). Lake (2004) and Cheung (2004) also recommend that principals participate in training and education related to emotional intelligence.

Research has been completed related to the development of leadership effectiveness of school principals through the use of coaching. Contreras (2008) surveyed 64 leadership coaches and 60 principals in California and found that both groups agreed upon the knowledge, skills, and behaviors effective coaches needed to support the leadership development of principals. Additionally, the researcher concluded that emotional intelligence was one construct that needed to be developed in both school principals and their leadership coaches. Moore (2007) found that, after four months of coaching in the development of emotional intelligence, the three principals in his comparative case study grew in their emotional intelligence and believed the coaching was beneficial to them in their leadership work.

<center>Summary of Findings and Themes Within Reviewed Literature</center>

The previous review of literature represents the theoretical frameworks related to the research questions addressed by the study. This final chapter section summarizes prominent themes and findings within the frameworks. This summarization will serve as a base for comparison of study findings to relevant literature in Chapter Five.

Emotional intelligence is a construct encompassing four domains: 1) self-awareness, 2) self-management, 3) social awareness, and 4) relationship management (Goleman et al., 2002). Self-awareness includes three personal competencies: 1) emotional self-awareness, 2) accurate self-assessment, and 3) self-confidence. Self-management encompasses six personal competencies: 1) emotional self-control, 2) transparency, 3) adaptability, 4) achievement, 5) initiative, and 6) optimism. Social awareness is comprised of three social competencies: 1) empathy, 2) organizational awareness, and 3) service. Relationship management involves seven social competencies: 1) inspirational leadership, 2) influence, 3) developing others, 4) change catalyst, 5) conflict management, 6) building bonds, and 7) teamwork and collaboration. Emotional intelligence in its four domains is a partner to rational intelligence. Cooper (1997) contends that

> we are paying a drastic price, in our personal lives and organizations, for our attempts to separate our hearts from our heads and our emotions from our intellect. It can't be done. We need both, and we need them working together. (p. 32)

The human brain is home to powerful emotional experience and rational thought (Damasio, 1994). It has the ability to instantly fight or flee and the ability to think through an experience and delay immediate response if that is in its best interest. Being aware of the impact of emotions and managing them is the key to best thinking and acting. Lam & Kirby (2002) state that emotionally intelligent people are "less likely to be paralyzed by fear, hijacked by negative emotions, and strangled by anxiety, all of which have negative effects on both individual and team performance" (p. 142).

Emotional intelligence is measurable through self-report assessments, informant assessments, and performance assessments. There are several validated assessments in use and a wide range of informal inventories available via the Internet. Once assessed, emotional intelligence can be developed. Individuals, teams, and leaders can learn to be more emotionally intelligent.

Organizational success increases as individual emotional intelligence capacity increases. Emotional intelligence, or a lack thereof, can have a significant impact on employee retention, employee productivity, the achievement of stated goals, and the financial success of organizations.

Emotional intelligence can make a huge difference in both our personal lives and our work satisfaction and performance. Emotional intelligence is the distinguishing factor that determines if we make lemonade when life hands us lemons or spend our life stuck in bitterness. It is the distinguishing factor that enables us to have wholesome, warm relationships rather than cold and distant contact. EQ is the distinguishing factor between finding and living our life's passions or just putting in time. EQ is the distinguishing factor that draws others to us or repels them. EQ is the distinguishing factor that enables us to work in concert and collaboration with others or to withdraw in dispute. (Lynn, 2005, p. vi)

Effective leaders will increase their influence in moving followers and the organization as a whole toward goal achievement by leading in emotionally intelligent ways.

In addition to the literature related to emotional intelligence, much has been

written about effective leadership and effective school leadership. Marzano et al. (2005), in their meta-analysis of related research conducted in the past 35 years, identified 21 specific leadership practices, which they refer to as leadership responsibilities, that correlated to student academic achievement. Increasing the principal's engagement in these leadership practices can have a dramatic effect on the achievement of students within that principal's school. Increasing student achievement is not only what the external public demands, it is the ultimate moral imperative of school leadership.

Review of Research and Theory about the Need to Address

Effective School Leadership in the Current Context

Sachs & Blackmore (1998) summarized the current context for school leaders and the corresponding need to further explore the relationship between emotional intelligence and effective school leadership. They call school leadership an "emotional labour" and point out that schools are "complex emotional arenas" (p. 279). They contend that principals are familiar with responding to constant demands and changes, to the public's expectation of providing quality education to students with diminishing financial and human resources, to micro-politics, to social pressures of educating a responsible citizenry, to guilt at the loss of personal family time, to juggling conflicting expectations from many arenas, to burnout and cynicism, all in the context of unwritten rules about not letting emotions show. Principals are told to lead with the head while ignoring the heart and that being professional means suppressing the very emotions that make us human.

Emotional intelligence may be related to the resiliency of school leaders, which has been linked to successful leadership. In her study of 63 public school principals from five southern states, Bumphus (2008) found a significant positive relationship between

self-reported emotional intelligence and resilience among the school principals in the study. Resiliency may help school leaders deal with the stress inherent in the role of the principal, further helping them to be successful and effective in their leadership. Goldstein (2003) also found a relationship between emotional intelligence and resiliency. In her phenomenological study of seven elementary Catholic school principals, she found the higher the principals' level of emotional intelligence, the higher their perceptions of resiliency and effectiveness.

It is human nature to be emotional (Dickmann & Stanford-Blair, 2002). School leaders are not exempt from being emotional beings. The emotional centers in the brain tell principals to pay attention to things in their environment that are important; emotion trumps everything else including, at times, rational thought (Damasio, 1994). Emotions are what motivate school leaders to respond to their interests, passions, and goals. School leaders can learn to be aware of, and manage, their emotions as well as to be socially aware and to manage relationships in the work environment. School leaders, like leaders in other organizational settings who are emotionally intelligent in this manner, help to create resonance within the organization furthering organizational mission and goals (Goleman et al., 2002). For school principals, the mission is to do everything in their collective power to enhance student learning.

Researchers have started investigating the possible relationship between emotional intelligence and student achievement. In a study of 29 urban school principals, some of whom served in high-poverty schools making adequate yearly progress (AYP), and some of whom served in high-poverty schools not making AYP, Buntrock (2008) found no statistically significant difference in the emotional intelligence of the principals

in both groups. However, in analyzing the results from the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) taken by participants in the study, the researcher noted a small effect size on the branch score of the assessment related to perceiving emotions and a medium effect size on the branch score of the assessment related to managing emotions. These two branches, similar to the awareness and management domains articulated by Goleman et al. (2002), are associated with transformational leadership.

There is more to learn about the impact of emotionally intelligent leadership in the school setting and its corresponding impact on student achievement. While the research suggests a similarity between the domains and competencies that comprise emotional intelligence (Goleman et al., 2002) and the 21 leadership responsibilities that impact student achievement identified by Marzano et al. (2005), further study is needed. The proposed plan for research is worthy of study and fills a gap within the current knowledge base. As Boyatzis, Goleman, and Rhee (2000) stress,

> the need for more research into the construction of personality and determinants and consequences of our behavior is more than a perpetual plea of scholars; it is an expression of our commitment to the benefits that accrue from our drive to satisfy our curiosity about being human. We seek to understand characteristics that predict better performance because we wish to be more effective. We seek to understand characteristics that predict more fulfilling lives because we see injustice and suffering and know that many of our lives are out of balance. . . .More research is needed to understand how our emotions and capabilities affect our lives and work. (p. 359)

With the expected turnover in school leadership due to retirements over the next several years (Fullan, 2002), now is the time to investigate if there is a correlation between emotional intelligence and effective school leadership that increases student achievement. Determining if a relationship exists between these two constructs can inform the hiring, development, and retention of high quality school leaders who make a difference in student learning. The next chapter will describe the research design used to conduct the study.

CHAPTER THREE: RESEARCH DESIGN

Research Purpose

The purpose of this study was to determine if a relationship exists between emotional intelligence and research-based school leadership practices that increase student achievement. The related research questions were:

1. Is there a relationship between emotional intelligence and research-based school leadership practices that have been identified to increase student achievement?

2. If so, what specific research-based school leadership practices have the strongest positive correlations to each of the emotional intelligence competencies?

3. What insights can school leaders, who demonstrate high levels of emotional intelligence and engagement in research-based school leadership, provide into their formation as leaders and their leadership practice?

The research hypothesis for the first question was that there is a relationship between emotional intelligence and research-based school leadership practices that have been identified to increase student achievement. The null hypothesis is that there is no relationship between emotional intelligence and research-based school leadership practices that increase student achievement.

Research Approach and Methodology

The researcher selected a mixed methods, explanatory design (Creswell & Piano Clark, 2007) as the research approach in this study. The researcher designed the study to determine if a relationship exists between emotional intelligence and effective school

leadership, to determine which research- based school leadership practices have the strongest correlations to emotional intelligence competencies, and then to determine what insights school leaders, who demonstrate high levels of emotional intelligence and engagement in research-based school leadership practices, have into both their formation as leaders and their leadership practice. Correlation research was the methodology employed to answer the questions addressed by the study in the first phase. This quantitative methodology was selected because it was the appropriate means to help the researcher describe the linear relationship between two variables—emotional intelligence and engagement in effective school leadership practices—to determine whether these two variables share something in common (Salkind, 2006). The second phase within this research design was qualitative in nature with the participants identified for follow-up data collection as a result of the analysis of results from the first phase or quantitative portion of the study.

In answering the first question, three possibilities existed in exploring the relationship between emotional intelligence and engagement in effective school leadership practices. The correlation could have been direct, or positive, meaning that as emotional intelligence increased, engagement in research-based school leadership practices would also increase. The correlation could have been indirect or negative, meaning that as emotional intelligence increased, engagement in research-based school leadership practices decreased or that as emotional intelligence decreased, engagement in effective school leadership practices increased. The third possibility was that there would be no relationship between emotional intelligence and engagement in research-based school leadership practices.

To answer the second research question, correlation research would uncover which, if any, of the research-based school leadership practices identified by Marzano et al. (2005) had the strongest correlations specific to the domains and competencies of emotional intelligence identified by Goleman et al. (2002). To answer the third research question, qualitative data were collected and analyzed from participants who demonstrated the highest levels of emotional intelligence and engagement in research-based school leadership practices based upon their scores on the survey. Follow-up interviews with these participants were used to provide rich, descriptive detail that the initial rating scale survey could not provide. The interview technique employed complemented the quantitative approach in the study, strengthened the validity of the research, and provided a source for triangulation of the data and results. The mixed method approach also allowed the researcher to summarize large amounts of data to interpret statistically and generalize results while at the same time providing the opportunity to add greater depth, insight, and perspective into the numerical data results that were obtained (Roberts, 2004).

Research Sample

According to the *Wisconsin School Directory* (2006), 1,754 individuals served as K-12 public school principals in the state of Wisconsin. To minimize sampling error, increase generalizability of results, and make more precise the test of the null hypothesis that there is no relationship between emotional intelligence and engagement in research-based school leadership practices, it was necessary to identify a target sample large enough to represent the population. A target sample of approximately 300 respondents to the survey was desired as recommended by Leedy and Ormrod (2005). This would allow

for a five percent sampling error according to Suskie (1996), which means that with 95% certainty, the results of the sample surveyed should fall within five percent (plus or minus) of the results had the entire population been surveyed.

The researcher assumed a 40-50% response rate to the survey. The researcher also assumed that, since the *Wisconsin School Directory* (2006) was several months old when the sample for the study was selected, it was likely some e-mail addresses listed would be obsolete. Given these assumptions, to ensure the appropriate target sample size was met, the survey was sent to a larger simple random sample of K-12 Wisconsin public school principals, specifically 735. The names of all K-12 public school principals in the state of Wisconsin were imported from the Department of Public Instruction website into a Microsoft Excel spreadsheet and numbered. A set of random numbers was generated in Microsoft Excel and the simple random sample was drawn from the principals in the population according to the random numbers generated. Two hundred eight-five principals responded to the survey. Approximately 100 of the email surveys sent were returned as non-deliverable, due to obsolete email addresses caused when principals change jobs or retire.

<div align="center">Instrumentation</div>

<div align="center">*Nature and Appropriateness of Survey Technique*</div>

The use of a survey provides an efficient means to acquire information about a large group of people in a practical and manageable way (Leedy & Ormrod, 2005; Suskie, 1996). In a survey, a series of questions is posed to a sample of the population; their answers are recorded in a pre-determined manner and then analyzed so inferences can be drawn about the population based upon the sample surveyed. In this research

study, the researcher selected a descriptive rating survey using a Likert scale ranging from 1-10 to record responses to questions so interval data could be collected and statistical analysis of data could be conducted. An electronic Likert rating scale was chosen for its familiarity to principals and for the ease of completion. Given the large number of principals in the population studied, and the recommended sample size, it would have been impractical for the researcher to personally contact each principal in the sample to collect the desired information, therefore, an electronic instrument was selected for collecting survey data.

Two variables were examined in this research: emotional intelligence and engagement in research-based school leadership practices that impact student achievement. Emotional intelligence was the independent variable and engagement in research-based school leadership practices that impact student achievement was the dependent variable. To measure these two variables, a random sample of 285, K-12 public school principals in the state of Wisconsin completed a two-part, electronic, self-report rating scale using SurveyMonkey.com. The sampling error was 5% (Suskie, 1996). According to Leedy and Ormrod (2005), rating scales are useful when behaviors need to be evaluated on a continuum, so a ten point Likert scale rating scale (from "never" to "always") was used to obtain interval data related to the frequency that each participant engaged in the behaviors described on the survey. The survey was intended to take between 15 and 20 minutes to complete.

The first part of the survey was a 32-item, self-report measure of the principals' level of engagement in the 21 leadership responsibilities identified by Marzano et al. (2005). The second part of the survey was a 25-item, self-report measure of the

principals' competencies in emotional intelligence within the four domains identified by

Goleman et al. (2002). Respondents needed to complete one survey and then correlations

were calculated between the two parts of the survey, with each part measuring a different

variable—either engagement in research-based school leadership practices or emotional

intelligence. Using one two-part survey was preferred to using two separate surveys to

increase the response rate. Using the two-part, self-report rating scale was the most

efficient way to collect the quantitative data necessary related to both variables. Using the

10-point rating scale allowed the researcher to conduct a valid statistical analysis of the

results described in this study. Table 5 lists the 32 school leadership questions posed on

the survey and Table 6 lists the 25 emotional intelligence questions posed on the survey.

Table 5

School Leadership Survey Questions

In your role as a school leader, to what degree…

1. do you recognize and celebrate the accomplishments of your school's students and staff?

2. do you admit your school's shortcomings including inferior performance by students/staff?

3. are you willing to lead change initiatives with uncertain outcomes?

4. do you encourage and empower staff to take risks?

5. do you recognize individuals for their performance results?

6. do you facilitate effective means of communication with and between staff?

7. do you facilitate effective means of communication with and among students?

8. do you promote cohesion, purpose, and well-being among staff?

9. do you develop a shared vision of what your school could be like?

10. do you protect instructional time from interruption?

11. do you adapt your leadership style to effectively meet the needs of specific situations?

12. do you encourage people to express diverse opinions?

13. do you establish clear, achievable goals for curriculum, instruction, and assessment practices within your school?

14. do you hold high expectations that all students can learn at high levels?

15. do you keep continued, focused attention on learning and performance goals?

16. do you possess and share with staff well-defined beliefs about schools, teaching, and learning?

17. do you demonstrate behaviors and practices that are consistent with your beliefs?

18. do you provide opportunities for your staff to be involved in decision making and the development of school policies?

19. do you keep yourself well-informed about current research and theory on effective schooling?

20. do you foster systematic discussion about cutting-edge research and theory on effective schooling?

21. are you directly involved in helping teachers design curriculum, instruction, and assessment?

22. do you monitor the impact of your school's curricular, instructional, and assessment practices on student achievement?

23. do you portray a positive attitude about the ability of staff to accomplish substantial things?

24. do you ensure that your school complies with all school, district, and state policies and procedures?

25. are you an advocate for your school with parents, community, and central office?

26. do you maintain personal relationships with teachers and acknowledge the significant personal issues in their lives?

27. do you ensure that teachers have the materials and equipment necessary for instruction?

28. do you ensure that teachers have the necessary staff development opportunities to enhance their teaching effectiveness?

29. are you aware of informal groups and relationships among the staff?

30. do you make systematic and frequent visits to classrooms?

31. do you strive to build relationships with students?

32. are you highly visible to students, teachers, and parents?

Table 6

Emotional Intelligence Survey Questions

As an individual, to what degree…

1.	do you acknowledge your own strengths and limitations?	
2.	do you recognize your own emotions?	
3.	do you realize the impact of your emotions on what is happening around you?	
4.	are you able to describe your emotions?	
5.	are you confident in your abilities and self-worth?	
6.	do you remain composed in stressful situations?	
7.	are you trustworthy?	
8.	are you able to adapt to uncertainty and changing conditions?	
9.	are you flexible to overcome obstacles?	
10.	do you work to improve your performance?	
11.	do you act in ways to do things better?	
12.	do you look for the positive side of difficult people, events, and situations?	
13.	do you view unexpected situations as opportunities rather than threats?	
14.	do you listen attentively to understand the feelings and perspectives of others even when they are different from your own?	
15.	do you understand the informal structures, social networks, and politics at work within your organization?	
16.	do you strive to recognize and meet the needs of all stakeholders?	
17.	do you accurately read the mood of others within the organization?	
18.	do you work to set a positive emotional tone in your organization?	
19.	do you inspire others to work toward a compelling vision?	
20.	are you able to influence and persuade others by engaging them in dialogue?	
21.	do you invest effort in developing other people's abilities?	
22.	do you initiate and lead productive change?	
23.	do you work to resolve conflict by facilitating open communication regarding the disagreement?	
24.	do you strive to build and maintain positive relationships?	
25.	do you model respect, cooperation, and team building?	

Nature and Appropriateness of Interview Technique

Interviews provide researchers with a means to collect rich, descriptive information that might be difficult to gather on an electronic survey instrument. The use of interviews as a research technique allows the researcher to follow-up with the participant in ways that lead to clarification and extension of thought (Leedy & Ormrod, 2005; Rubin & Rubin, 2005; Salkind, 2006; Weiss, 1994). Interviews were chosen for

this study to provide a source of additional insight into the relationship between emotional intelligence and engagement in research-based school leadership practices from practitioners in the field, specifically to investigate the influences on leadership formation and examine examples of actual school leadership practice. Data collected were a means to provide depth to the research, as well as, to extend and provide validation and triangulation of quantitative results. Given the large size of the population being studied, and because interviews take an extensive amount of time, a limited number of principals (11) were interviewed, until saturation was achieved in data collection, as a follow-up to the electronic survey.

<div align="center">Data Collection</div>

This study employed the techniques of a rating scale survey and personal interviews to generate data relevant to the research questions. The researcher created both the survey instrument and the interview protocol for this study. Both the survey instrument and the interview protocol were field tested prior to use with the sample population identified for the study.

<div align="center">*Creating and Field Testing the Survey*</div>

The two-part survey used in this research study was designed and field-tested by the researcher. Face and content validity were established through a thorough review of the literature, particularly two sources, *School Leadership that Works: From Research to Results*, by Marzano et al. (2005) and *Primal Leadership: Realizing the Power of Emotional Intelligence,* by Goleman et al. (2002) which provided guidance in development of the content measured on the survey. Additionally, a panel of six experts in the field of education, with knowledge related to the content of the survey, reacted to

initial and subsequent drafts of the survey, providing feedback specifically related to content and construct validity. The panel provided feedback on wording, clarity, ease of use, format, and ordering of the survey questions. Measurement error was addressed through focus group analysis and feedback prior to the field test and through a field test of the revised survey. The original panel of six educational experts, along with principals who participated in the field test of the revised survey, comprised the focus group.

The researcher conducted a field test for part one of the survey in January 2007. Seven elementary principals, one middle school principal, and two high school principals participated anonymously in the field test. In this way, the field test participants represented the main principal groups comprising the population in the study: elementary, middle school, and high school. Three participants were from the researcher's school district, one was from a neighboring district, and six were attendees at a state educational conference. The survey results were initially entered into an Excel spreadsheet. Later, a codebook was created for the survey and the coded survey data were transferred into SPSS where statistical analysis was completed.

For each question on part one of the survey measuring engagement in research-based school leadership practices, the range, mean, and standard deviation for each response were calculated. The leadership responsibility with the greatest range in response on the 10-point Likert scale was related to affirmation (1.0-8.0). The leadership responsibilities with the highest means were related to being a change agent ($M = 8.9$), being visible ($M = 8.7$) and having knowledge of effective curriculum, instruction, and assessment ($M = 8.5$). The largest variances were found in leadership responsibilities related to discipline and intellectual stimulation ($SD = 2.55$ and 2.23 respectively). The

smallest variance in response was the leadership responsibility related to resource

provision, specifically professional development (*SD* = .78).

The researcher calculated internal consistency reliability statistics for the 32-item

portion of the field-test survey. A Cronbach's Alpha reliability coefficient of .86 was

calculated illustrating the portion of the survey measuring engagement in research-based

school leadership practices has high reliability for measuring leadership responsibilities

(Cohen, Cohen, West, & Aiken, 2003; Salkind, 2004).

The researcher calculated a factor analysis on the survey data from the field test of

part one of the survey. The factor analysis reduced the number of factors to nine with the

first seven factors contributing 93% of the variance. An examination of those leadership

responsibilities within each component listed on the component matrix with a score of .5

or above illustrated those leadership responsibilities that seem to be related within each

factor (D. Recht, personal communication, January 27, 2007). For example, within factor

six, the leadership responsibilities of discipline and visibility seem to be related

indicating a clustering or underlying theme within the data (Leedy & Ormrod, 2005).

The researcher conducted a field test for part two of the survey measuring

emotional intelligence in April 2007. Five elementary principals, two middle school

principals, and three high school principals participated anonymously in the field test.

These field test participants represented the main principal groups comprising the

population in the study: elementary, middle school, and high school. Six participants

were from the researcher's school district and four participants were from other

Wisconsin school districts. The survey results were initially entered into an Excel

spreadsheet. Later, a codebook was created for the survey and the coded survey data was transferred into SPSS where statistical analysis was done.

The researcher calculated the range, mean, and standard deviation for each question on part two of the survey. The emotional intelligence competency with the greatest range of response on the 10-point Likert scale was related to organizational awareness (3.0-9.0). The emotional intelligence competency with the highest mean was transparency ($M = 9.6$). The greatest variances were found in the competencies related to organizational awareness and emotional self-awareness ($SD = 2.02$ and 1.95 respectively). The smallest variance in response was the competency related to transparency ($SD = .78$).

The researcher calculated internal consistency reliability statistics for the 25-item portion of the survey measuring emotional intelligence. A Cronbach's Alpha reliability coefficient of .91 was found, illustrating the survey has high reliability for measuring leadership responsibilities (Cohen, Cohen, West, & Aiken, 2003; Salkind, 2004).

The researcher also completed a factor analysis on part two of the survey data. The factor analysis reduced the number of factors to nine with the first seven factors contributing 94% of the variance. An examination of the emotional intelligence competencies within each component listed on the component matrix with a score of .5 or above illustrated those emotional intelligence competencies that seem to be related within each factor (D. Recht, personal communication, January 27, 2007). For example, within factor six, the competencies of organizational awareness and influence seem to be related indicating a clustering or underlying theme within the data (Leedy & Ormrod, 2005).

Revisions to the survey were made based on feedback from the panel of experts, survey participants, and field tests of both parts of the survey. Part one of the original survey consisted of forty questions designed to measure the 21 leadership responsibilities identified by Marzano et al. (2005). The original five-point scale utilized the following descriptors: never, rarely, sometimes, frequently, and almost always. It was determined the survey needed to be shortened to increase participant completion.

A subsequent survey reduced the number of questions on part one measuring school leadership to 30 and used a 10-point Likert scale with the descriptors "never" at the lowest end of the scale, "50% of the time" between points 5 and 6 on the scale, and "always" at the highest end of the scale. The final survey added two questions to address critical content, four questions designed to gather demographic information, and specific examples for each item to assist with interpretation and clarity of each question. The final survey also included a revised introduction that addressed participants in the actual study sample, as well as a survey item soliciting additional contact information for participants who were willing to assist with the qualitative aspect of the research, which occurred in the second phase of the study.

The final version of the two-part survey instrument used in this study can be found in Appendix A. A copy of the introductory letter to participants included in the email notification, the invitation to participate in the study by completing the electronic survey, and the texts from reminder emails sent to non-respondents during the data collection procedures in an attempt to increase the response rate can be found in Appendix B. A table of specifications matrix indicating the 21 leadership responsibilities

and the four domains of emotional intelligence, with the corresponding survey items numbers addressing each responsibility and domain, can be found in Appendix C.

The two parts of the survey were used to calculate correlations to answer the first research question: Is there a relationship between emotional intelligence and research-based school leadership practices that increase student achievement? Correlations between these two variables were calculated using the total score for the survey questions measuring emotional intelligence and the total score for the survey questions measuring principals' engagement in effective, research-based school leadership practices. Additionally, correlations between the 19 competencies of emotional intelligence (Goleman et al., 2002) and the 21 school leadership responsibilities (Marzano et al., 2005) were also calculated and analyzed. The overall correlation between emotional intelligence and principal engagement in research-based school leadership practices, as well as the correlations between the 19 emotional intelligence competencies and 21 school leadership responsibilities, are reported in chapter four.

Creating and Field Testing the Interview Protocol

In January 2008, the researcher developed a protocol for the semi-structured interviews with those principals scoring highest on both the portion of the survey measuring emotional intelligence and the portion of the survey measuring engagement in research-based school leadership practices. The following questions were developed and asked of each interviewee regarding the four domains of emotional intelligence (self-awareness, self-management, social awareness, and relationship management):

1. Tell me about how you came to exhibit this characteristic of emotional intelligence?

2. Who or what influenced the development of this characteristic of emotional

   intelligence?

3. How does this characteristic of emotional intelligence translate into your school

   leadership practice?

In February 2008, an elementary principal in a nearby community, with whom the

researcher previously worked, agreed to field test the interview protocol and questions

with the researcher. This interview allowed the researcher to field test the questions and

practice interview protocol and interview techniques. As a result, the researcher could

acquire a level of comfort and competence prior to conducting the remaining ten

interviews.

After the field test interview was conducted using the questions outlined

previously, both the researcher and the interview participant determined the questions

artificially separated the four domains of emotional intelligence in a way that made

answering them unnecessarily awkward. Responses regarding the same questions within

each of the four domains seemed to overlap, weaving in, among, and between the four

domains in a more natural way. As a result, two main questions emerged and were

determined to be adequate for capturing the principals' insights into emotionally

intelligent school leadership desired by the researcher. The main interview questions

were modified as follows:

1. How did you come to be the leader you are today? In other words, who or what

   influenced your development as an emotionally intelligent leader?

2. How does emotional intelligence manifest itself in your school leadership practice? In other words, what does emotional intelligence look like in your leadership practice?

Study Procedures

In May 2007, the researcher obtained a current list of Wisconsin public school principals from the Department of Public Instruction publication, *Wisconsin School Directory* (2006), and determined the random sample of participants to receive the survey from this list in June 2007. The researcher sent the rating scale survey to the sample population in October 2007. Suskie (1996) suggests sending surveys during optimal times to increase the response rate. October was selected because the new school year is underway, and it does not conflict with the late fall and winter holiday season.

An e-mail with an introductory letter that guaranteed confidentiality and contained a link to the electronic survey was sent to each participant in the sample. Participants gave their consent to participate in the study by completing the electronic survey. Four follow-up e-mail reminders were sent to those principals who did not respond to the initial introductory e-mail. Data entry within Survey Monkey was automatic and continuous; as participants completed the survey online, the data were received electronically from the link within the survey. Rating scale data from the survey were collected from October 2007 to December 2007.

Principals taking the electronic survey were asked to indicate if they were willing to participate in a follow-up interview to further explore emotional intelligence in research-based school leadership and, if so, to provide contact information. In addition to the principal selected for the field test of the interview protocol, ten other principals,

whose scores on the two-part survey indicated both high levels of emotional intelligence and high levels of engagement in research-based school leadership practices, were selected from those who indicated a willingness to participate in a follow-up interview. Six elementary principals, four middle school principals, and one K-12 principal were selected to participate in follow-up interviews. Interviewees, from across the state, represented small school districts (less than 1,500 students) and mid-sized school districts (1,500 to 10,000 students). The years of experience for the interviewees varied from one to more than 20 years. Interviews were conducted either in person or via telephone from March 2008 to June 2008.

A revised protocol was established for the semi-structured interviews after the field test and the consistent schedule of main questions listed previously was used with each principal selected for participation in follow-up interviews. After initial greetings and introductions, the researcher provided each interviewee with a brief background of the study and an explanation of how individuals were selected for participation in the follow-up interview. Permission to record the interview was obtained and the researcher started with the first main question's prompt: "Tell me about how you came to be the leader you are today. In other words, who or what influenced your development as an emotionally intelligent leader?" The second main question's prompt followed during the course of the interview: "How does emotional intelligence manifest itself in your school leadership practice? In other words, what does emotional intelligence look like in your leadership practice?" Follow-up questions and probes were asked as appropriate during the interviews with the intent of seeking both clarification and elaboration. Each interview concluded with the question prompt: "Is there anything else you wish I would

have asked you today?" After this, the researcher thanked each interviewee, indicated that

a transcript of the interview would be e-mailed to the participant for review of accuracy,

asked if it would be acceptable to call for follow-up clarification, and offered to send a

copy of the dissertation when completed.

<div align="center">Data Analysis</div>

Data generated by techniques previously described were subsequently interpreted

through the analysis of correlations for the quantitative data collected and through

constant comparative analysis of the qualitative data obtained during the interviews. The

researcher completed statistical analyses of the quantitative data in January and February

2008. Means and standard deviations were calculated for each item on the rating scale

survey. The researcher calculated a Pearson product moment correlation using two data

sets—the total score for engagement in research-based school leadership on part one of

the survey and the total score for emotional intelligence on part two of the survey. A

coefficient of determination was computed to articulate the amount of variance that was

accounted for in one variable by the other. Similarly, correlations were also calculated

between the 19 competencies of emotional intelligence (Goleman et al., 2002) and the 21

school leadership responsibilities (Marzano et al., 2005). All correlations calculated were

tested at a significance level $p < .05$. The researcher calculated a factor analysis on each

part of the survey and on the combined survey to examine relationships among the 21

school leadership responsibilities and to examine relationships among the competencies

within emotional intelligence.

The researcher digitally recorded all interviews and transcribed them from July

2008 through October 2008. Narrative responses from the transcriptions of the follow-up

interviews were read and coded relative to influences on leadership formation and relative to what emotionally intelligent school leadership looks like in practice. The researcher used a constant comparative method to identify commonalities, consistencies, and patterns in the responses (Leedy & Ormrod, 2005; Lincoln & Guba, 1985; Rubin & Rubin, 2005; Weiss, 1994). Excel spreadsheets were used to record common themes and supporting quotes from each interview transcript. One spreadsheet noted themes from the interviewee responses to the leadership formation question, and another spreadsheet noted leadership practices articulated by interviewees in each of the four domains of emotional intelligence. Two members of the dissertation committee for this study reviewed the researcher's coding of the qualitative data obtained in the interviews and agreed the data were appropriately coded, providing evidence of inter-rater reliability. The researcher completed qualitative analyses of the data from October 2008 to December 2008.

<p align="center">Limitations</p>

The researcher worked diligently to alleviate validity threats in this study. A simple random sample of adequate size reduced the threat related to subject limitation and was representative of the population to assure generalizability of the results. A comprehensive review of the literature helped establish construct validity of the survey. The panel of experts and subsequent field tests of the survey established face and content validity of the instruments used in this study. Survey validity was context specific as the survey was given to K-12 public school principals. The factor analysis conducted on the survey data provided another form of validity as the 13 factors extracted aligned closely with the 21 research-based school leadership practices as well as the four domains and 19

competencies of emotional intelligence. The two sources of data (surveys and interviews) provided by the explanatory model of mixed method design (Creswell & Piano Clark, 2007) used in this study helped create triangulation, supporting the findings and conclusions reported in the next two chapters.

A limitation and possible bias the researcher was unable to eliminate was the possible inflation or deflation of rating scale scores inherent in any self-report measure. It is possible that participants completing the survey could have judged themselves either more or less favorably than the reality of their engagement in research-based school leadership practices and emotional intelligence would indicate. However, because the researcher was not using the self-report measures to make a judgment on the actual level of emotional intelligence or the actual level of engagement in research-based school leadership practices, but rather to determine if there was a correlation between the two variables, this limitation did not interfere with the purpose of the study to any unacceptable degree.

CHAPTER FOUR: RESEARCH RESULTS

Presentation of Approach

The purpose of this study was to examine if a relationship exists between emotional intelligence and research-based school leadership practices that impact student achievement. The research questions were

1. Is there a relationship between emotional intelligence and research-based school leadership practices that have been identified to increase student achievement?

2. If so, what specific research-based school leadership practices have the strongest positive correlations to each of the emotional intelligence competencies?

3. What insights can school leaders, who demonstrate high levels of emotional intelligence and engagement in research-based school leadership, provide into their formation as leaders and their leadership practice?

The study was a mixed method, explanatory design (Creswell & Piano Clark, 2007) utilizing both quantitative and qualitative methods of data collection in a multiphase investigation. Initially, a 10-point Likert scale survey, designed to measure emotional intelligence and engagement in research-based school leadership practices, was completed by a random sample of 285, K-12 public school principals in the state of Wisconsin. Following the survey, 11 of these principals, scoring highest in emotional intelligence and in engagement in research-based school leadership practices, participated in semi-structured, follow-up interviews to expand upon the findings from the first phase of the study.

The study also conducted a literature review related to research and study in the areas of emotional intelligence, effective school leadership, emotional intelligence related to leadership, emotional intelligence related to organizational effectiveness, and emotional intelligence related to schools and effective school leadership. A two-part theoretical framework underpinned the study: one part related to emotional intelligence in four domains and 19 competencies (Goleman et al., 2002) and one part related to the 21 research-based school leadership practices that impact student achievement as described by Marzano et al. (2005).

Presentation and Summary of Data

This chapter presents a summary of data generated in both the quantitative and qualitative phases of the study design. Specifically, this chapter will: 1) describe the demographics related to the sample population surveyed; 2) report and describe findings related to research question one including survey reliability, data collected from the survey of principals, and the correlation discovered between emotional intelligence and engagement in research-based school leadership practices; 3) report and describe findings related to research question two including the presentation of correlations between specific competencies of emotional intelligence and specific research-based school leadership practices and the presentation and explanation of the factor analysis completed on the data collected; 4) describe the demographics related to the sample selected for follow-up interviews; 5) report and describe the findings related to research question three including specific examples from the narrative responses gathered, analyzed, and coded from interview transcripts; and 6) present a summary of data findings.

Description of Demographics Related to Sample Surveyed

Two hundred eight-five principals responded to the survey measuring emotional

intelligence and engagement in research-based school leadership practices. This

represents a 45% response rate. Of the 285 principals in the sample, 56.1% ($n = 160$)

were male, 43.2% ($n = 123$) were female, and in 0.7% (2) of the cases, gender was not

indicated. Elementary principals comprised 46.7% ($n = 133$) of the respondents, 19.2%

($n = 55$) served as middle school or junior high principals, 16.8% ($n = 48$) served as high

school principals, 5.6% ($n = 16$) served as elementary and middle school or junior high

principals, 5.9% ($n = 17$) served as middle school or junior high and high school

principals and 5.2% ($n = 15$) served as elementary, middle school or junior high and high

school principals. One respondent (0.3%) did not indicate the leadership level served.

Approximately twenty-two percent of respondents ($n = 64$) to the survey served as a

principal for one to five years, 29.4% ($n = 84$) had served for six to ten years, 24.2%

($n = 69$) served for 11-15 years, 12.2% ($n = 35$) served for 16-20 years, and 11.2%

($n = 32$) served for more than 20 years as a principal. One respondent (0.3%) did not

indicate the number of years served. Approximately thirty-seven percent of principals

($n = 106$) responding to the survey served in small, rural districts with less than 1,500

students, 48.7% ($n = 139$) served in mid-sized districts with 1,500-10,000 students, and

13.6% ($n = 39$) served in large, urban districts with more than 10,000 students. One

respondent did not indicate the size of the district. Table 7 summarizes the demographics

of the 285 participants in the survey.

Table 7

Demographic Summary for Survey Participants

Gender	Number	Percent
Male	160	56
Female	123	43
Unknown	2	.07
Type of School Served		
Elementary	133	47
Middle School or Junior High	55	19
High School	48	17
Elementary and Middle or Junior High	16	6
Middle or Junior High and High School	15	6
K-12	1	5
Number of Years Served		
1-5	64	22
6-10	84	29
11-15	69	24
16-20	35	12
20+	32	11
Unknown	1	.03
Size of District Served		
Rural < 5,000 students	106	37
Mid-sized 1,500-10,000 students	139	49
Large > 10,000 students	39	14
Unknown	1	.03

Findings Related to Research Question One

The first research question was: Is there a relationship between emotional

intelligence and research-based school leadership practices that have been identified to

increase student achievement? To investigate this question, a random sample of 285,

K-12 public school principals participated in a survey that measured both their emotional

intelligence and their level of engagement in research-based school leadership practices.

This section will address survey reliability, descriptive statistics related to the survey

responses, and the correlation found between the two variables studied.

Survey Reliability

To determine survey reliability, Cronbach's Alpha reliability coefficients were calculated for the two individual parts of the survey and for the overall survey. The Cronbach's Alpha reliability coefficient for the 25-item part of the survey measuring emotional intelligence was .93. The Cronbach's Alpha reliability coefficient for the 32-item part of the survey measuring engagement in research-based school leadership practices was .92. The Cronbach's Alpha reliability coefficient for all 57 items on the survey was .95. All three coefficients indicate appropriate levels of reliability on the survey designed for and utilized in this study (Cohen et al., 2003).

Data Collected from the Survey of Principals

The survey yielded data regarding the level of emotional intelligence and engagement in research-based school leadership practices for the 285 principals who participated in the survey. Table 8 presents the descriptive statistics for responses to questions on the portion of the electronic survey measuring principals' engagement in research-based school leadership practices.

Table 8

Descriptive Statistics for School Leadership Survey Questions

Question	Mean	Standard Deviation
Q1 Affirmation (Positive)	7.43	1.67
Q2 Affirmation (Negative)	6.72	1.84
Q3 Change Agent (Self)	8.32	1.29
Q4 Change Agent (Others)	8.92	1.09
Q5 Contingent Rewards	7.97	1.40
Q6 Communication (Staff)	8.36	1.41
Q7 Communication (Students)	7.77	1.64
Q8 Culture (Cohesiveness)	7.37	1.82
Q9 Culture (Vision)	7.41	1.73
Q10 Discipline	8.34	1.32
Q11 Flexibility (Style)	8.14	1.11
Q12 Flexibility (Diversity)	8.19	1.35
Q13 Focus (Goals)	7.42	1.63
Q14 Focus (Expectations)	8.20	1.42
Q15 Focus (Sustainability)	7.51	1.63
Q16 Ideals (Self)	7.62	1.66
Q17 Ideals (Alignment)	7.81	1.62
Q18 Input	8.32	1.28
Q19 Know Curriculum, Instruction, Assessment	7.73	1.49
Q20 Intellectual Stimulation	6.91	1.77
Q21 Involve Curriculum, Instruction, Assessment	7.06	1.92
Q22 Monitor	6.71	2.13
Q23 Optimizer	8.55	1.20
Q24 Order	8.13	1.66
Q25 Outreach	8.17	1.53
Q26 Relationships	8.31	1.35
Q27 Resource (Staff)	8.78	1.03
Q28 Resource (Professional Development)	8.49	1.10
Q29 Situational Awareness	7.80	1.37
Q30 Visibility (Classroom)	7.50	1.62
Q31 Visibility (Student Relationships)	8.56	1.31
Q32 Visibility (Visible)	8.96	1.10

Note. n = 285.

Table 9 provides the same data ranked in order from highest to lowest means.

Table 9

Means for School Leadership Survey Questions Ranked Highest to Lowest

Question	Mean	Standard Deviation
Q32 Visibility (Visible)	8.96	1.10
Q4 Change Agent (Others)	8.92	1.09
Q27 Resource (Staff)	8.78	1.03
Q31 Visibility (Student Relationships)	8.56	1.31
Q23 Optimizer	8.55	1.20
Q28 Resource (Professional Development)	8.49	1.10
Q6 Communication (Staff)	8.36	1.41
Q10 Discipline	8.34	1.32
Q3 Change Agent (Self)	8.32	1.29
Q18 Input	8.32	1.28
Q26 Relationships	8.31	1.35
Q14 Focus (Expectations)	8.20	1.42
Q12 Flexibility (Diversity)	8.19	1.35
Q25 Outreach	8.17	1.53
Q11 Flexibility (Style)	8.14	1.11
Q24 Order	8.13	1.66
Q5 Contingent Rewards	7.97	1.40
Q17 Ideals (Alignment)	7.81	1.62
Q29 Situational Awareness	7.80	1.37
Q7 Communication (Students)	7.77	1.64
Q19 Know Curriculum, Instruction, Assessment	7.73	1.49
Q16 Ideals (Self)	7.62	1.66
Q15 Focus (Sustainability)	7.51	1.63
Q30 Visibility (Classroom)	7.50	1.62
Q1 Affirmation (Positive)	7.43	1.67
Q13 Focus (Goals)	7.42	1.63
Q9 Culture (Vision)	7.41	1.73
Q8 Culture (Cohesiveness)	7.37	1.82
Q21 Involve Curriculum, Instruction, Assessment	7.06	1.92
Q20 Intellectual Stimulation	6.91	1.77
Q2 Affirmation (Negative)	6.72	1.84
Q22 Monitor	6.71	2.13

Note. n = 285.

Means for the survey questions measuring principals' engagement in research-based school leadership practices ranged from 6.71 to 8.96 on the 10-point Likert frequency scale with 10 (always) being the highest score. The school leadership practices with the lowest means were Monitor ($M = 6.71$) and Affirmation-Negative ($M = 6.72$)

indicating that principals participating in the survey were least likely to monitor the

effectiveness and impact of school practices regarding curriculum, instruction, and

assessment on student learning and to admit to shortcomings of the school's staff and

students as compared to the other 19 school leadership practices. The school leadership

practices with the highest means were Visibility-Visible (M = 8.96) and Change Agent-

Others (M = 8.92) indicating that principals participating in the survey were most likely

to be highly visible to students, teachers, and parents as well as to actively encourage and

empower others to take risks as compared to their level of engagement in the other 19

school leadership practices.

Standard deviations for the means from the survey questions measuring

principals' engagement in research-based school leadership practices ranged from 1.03 to

2.13. The school leadership practice with the least variance in scores was Resource-Staff

(SD = 1.03) indicating less variance in the degree to which principals ensure teachers had

the necessary materials and equipment for instruction. The school leadership practice

with the greatest variance in scores was Monitor (SD = 2.13) indicating that principals

participating in the survey were least similar in the degree to which they monitor the

effectiveness and impact of school practices regarding curriculum, instruction, and

assessment on student learning.

Table 10 presents the descriptive statistics for responses to questions on the

electronic survey measuring principals' emotional intelligence.

Table 10

Descriptive Statistics for Emotional Intelligence Survey Questions

Question		Mean	Standard Deviation
Q33 SA:	Accurate Self-Assessment	8.07	1.34
Q34 SA:	Emotional Self-Awareness	7.88	1.54
Q35 SA:	Accurate Self-Assessment	8.06	1.43
Q36 SA:	Emotional Self-Awareness	7.93	1.61
Q37 SA:	Self-Confidence	8.39	1.13
Q38 SM:	Emotional Self-Control	8.55	0.99
Q39 SM:	Transparency	9.43	0.75
Q40 SM:	Adaptability	8.67	0.82
Q41 SM:	Adaptability	8.72	0.87
Q42 SM:	Achievement	8.95	0.96
Q43 SM:	Initiative	8.90	0.87
Q44 SM:	Optimism	8.35	1.13
Q45 SM:	Optimism	8.10	1.15
Q46 SoA:	Empathy	8.38	1.09
Q47 SoA:	Organizational Awareness	8.47	0.99
Q48 SoA:	Service	8.32	1.10
Q49 SoA:	Organizational Awareness	8.15	1.04
Q50 RM:	Inspirational Leadership	8.89	0.97
Q51 RM:	Inspirational Leadership	8.24	1.13
Q52 RM:	Influence	8.19	1.01
Q53 RM:	Developing Others	8.30	1.00
Q54 RM:	Change Catalyst	8.25	1.06
Q55 RM:	Conflict Management	8.26	1.11
Q56 RM:	Building Bonds	8.96	0.93
Q57 RM:	Teamwork and Collaboration	9.02	0.93

Note. n = 285.

Table 11 provides the same data ranked in order from highest to lowest means.

Table 11

Means for Emotional Intelligence Survey Questions Ranked Highest to Lowest

Question		Mean	Standard Deviation
Q39 SM:	Transparency	9.43	0.75
Q57 RM:	Teamwork and Collaboration	9.02	0.93
Q56 RM:	Building Bonds	8.96	0.93
Q42 SM:	Achievement	8.95	0.96
Q43 SM:	Initiative	8.90	0.87
Q50 RM:	Inspirational Leadership	8.89	0.97
Q41 SM:	Adaptability	8.72	0.87
Q40 SM:	Adaptability	8.67	0.82
Q38 SM:	Emotional Self-Control	8.55	0.99
Q47 SoA:	Organizational Awareness	8.47	0.99
Q37 SA:	Self-Confidence	8.39	1.13
Q46 SoA:	Empathy	8.38	1.09
Q44 SM:	Optimism	8.35	1.13
Q48 SoA:	Service	8.32	1.10
Q53 RM:	Developing Others	8.30	1.00
Q55 RM:	Conflict Management	8.26	1.11
Q54 RM:	Change Catalyst	8.25	1.06
Q51 RM:	Inspirational Leadership	8.24	1.13
Q52 RM:	Influence	8.19	1.01
Q49 SoA:	Organizational Awareness	8.15	1.04
Q45 SM:	Optimism	8.10	1.15
Q33 SA:	Accurate Self-Assessment	8.07	1.34
Q35 SA:	Accurate Self-Assessment	8.06	1.43
Q36 SA:	Emotional Self-Awareness	7.93	1.61
Q34 SA:	Emotional Self-Awareness	7.88	1.54

Note. n = 285.

Means for the survey questions measuring principals' emotional intelligence

ranged from 7.88 to 9.43 on the 10-point Likert frequency scale with 10 (always) being

the highest score. The emotional intelligence competency with the lowest mean was

Emotional Self-Awareness ($M = 7.88$) indicating that principals participating in the

survey were least likely to recognize their own emotions as compared to the other 18

emotional intelligence competencies. The emotional intelligence competency with the

highest mean was Transparency ($M = 9.43$) indicating that principals participating in the

survey reported they were trustworthy to a greater degree when compared to the other 18 emotional intelligence competencies.

Standard deviations for the means from the survey questions measuring principals' emotional intelligence ranged from 0.75 to 1.61. The emotional intelligence competency with the least variance in scores was Transparency ($SD = 0.75$) indicating the principals surveyed were more similar in the degree to which they displayed trustworthiness. The emotional intelligence competency with the highest standard deviation in scores was Emotional Self-Awareness ($SD = 1.61$) indicating that principals participating in the survey were least similar in the degree to which they recognized their own emotions.

Correlation Between Emotional Intelligence and Engagement in Research-based School Leadership Practices

For each of the 285 participants of the survey, a total sum score was calculated for all questions measuring emotional intelligence and a total sum score was calculated for all questions measuring engagement in research-based school leadership practices. To quantify the linear relationship between emotional intelligence and engagement in research-based school leadership practices, a two-tailed Pearson correlation was calculated using the total scores from each part of the survey. The correlation, significant at the 0.01 level, was found to be .73. According to Salkind (2004), the demonstrated strength of the relationship between principals' emotional intelligence and their level of engagement in research-based school leadership practices is considered to be strong. Furthermore, the coefficient of determination is calculated to be .53 meaning that 52.9%

of the variance in one variable (emotional intelligence) is accounted for by the other variable (engagement in research-based school leadership practices).

Based upon the strength and significance of the correlation calculated, the researcher can reject the null hypothesis, which states there is no relationship between emotional intelligence and engagement in research-based school leadership practices. Therefore, the answer to the first research question is yes; a positive, direct relationship exists between the two variables investigated in this study. The next step determined which research-based school leadership practices were most strongly correlated to emotional intelligence competencies.

Findings Related to Research Question Two

The second research question was: What are the specific emotional intelligence competencies with the strongest positive correlations to specific research-based school leadership practices that have been identified to increase student achievement? To investigate this question, a matrix was used to display the correlations between the individual test questions on the 285 completed surveys. This section will report the findings from the correlation matrix and the factor analysis that was completed from the survey data.

Correlation Matrix Results

Using SPSS, correlations were calculated between each of the 25 questions on the survey measuring emotional intelligence and each of the 32 questions measuring principals' engagement in research-based school leadership practices. Of the 800 correlations calculated, 697 or 87.1% were positively correlated and significant at the .01 level, 45 or 5.6% were positively correlated and significant at the .05 level, and 58 or

7.2% showed no significant correlations. This demonstrates a high level of relatedness between the questions measuring emotional intelligence and those measuring engagement in research-based school leadership practices. The number of school leadership questions significantly correlated to the emotional intelligence competencies at $p < .01$ and $p < .05$ and the number of school leadership questions not significantly correlated are reported in Table 12.

Table 12

Significance Reported Related to Question-to-Question Correlations

Emotional Intelligence Question		Number of School Leadership Questions With Specified Significance Levels		
		$p < .01$	$p < .05$	not significant
Q33 SA:	Accurate Self-Assessment	26/32	2/32	4/32
Q34 SA:	Emotional Self-Awareness	29/32	1/32	2/32
Q35 SA:	Accurate Self-Assessment	29/32	0/32	3/32
Q36 SA:	Emotional Self-Awareness	26/32	2/32	4/32
Q37 SA:	Self-Confidence	29/32	2/32	1/32
Q38 SM:	Emotional Self-Control	20/32	4/32	8/32
Q39 SM:	Transparency	25/32	3/32	4/32
Q40 SM:	Adaptability	28/32	3/32	1/32
Q41 SM:	Adaptability	30/32	0/32	2/32
Q42 SM:	Achievement	30/32	1/32	1/32
Q43 SM:	Initiative	30/32	2/32	0/32
Q44 SM:	Optimism	22/32	4/32	6/32
Q45 SM:	Optimism	28/32	1/32	3/32
Q46 SoA:	Empathy	21/32	5/32	6/32
Q47 SoA:	Organizational Awareness	24/32	6/32	2/32
Q48 SoA:	Service	30/32	0/32	2/32
Q49 SoA:	Organizational Awareness	29/32	0/32	3/32
Q50 RM:	Inspirational Leadership	29/32	2/32	1/32
Q51 RM:	Inspirational Leadership	31/32	1/32	0/32
Q52 RM:	Influence	31/32	1/32	0/32
Q53 RM:	Developing Others	32/32	0/32	0/32
Q54 RM:	Change Catalyst	31/32	1/32	0/32
Q55 RM:	Conflict Management	30/32	2/32	0/32
Q56 RM:	Building Bonds	28/32	1/32	3/32
Q57 RM:	Teamwork and Collaboration	29/32	1/32	2/32

Because so many significant correlations were found between the emotional

intelligence competencies and the specific research-based school leadership practices, the

researcher analyzed for the highest correlations across the 19 emotional intelligence

competencies. Table 13 reports each of the emotional intelligence competencies

measured by questions on the survey and the school leadership practice with the highest

correlation. All correlations reported were significant at the p < .01 level.

Table 13

School Leadership Practices with Strongest Correlations to Emotional Intelligence

Competencies

Emotional Intelligence Competency	Leadership Practice	Correlation
Self-Assessment		
Accurate Self-Assessment	Contingent Rewards	$(r = .38)$
Emotional Self-Awareness	Contingent Rewards	$(r = .35)$
Self-Confidence	Resources	$(r = .35)$
Self-Management		
Emotional Self-Control	Resources	$(r = .31)$
Transparency	Visibility	$(r = .39)$
Adaptability	Flexibility	$(r = .39)$
Achievement	Focus	$(r = .40)$
Initiative	Communication	$(r = .39)$
Optimism	Flexibility	$(r = .41)$
Social Awareness		
Empathy	Flexibility	$(r = .33)$
Organizational Awareness	Relationships	$(r = .36)$
Service	Resources	$(r = .41)$
Relationship Management		
Inspirational Leadership	Focus	$(r = .46)$
Influence	Focus	$(r = .44)$
Developing Others	Focus	$(r = .43)$
Change Catalyst	Optimize	$(r = .48)$
Conflict Management	Situational Awareness	$(r = .47)$
Building Bonds	Relationships	$(r = .42)$
Teamwork and Collaboration	Visibility	$(r = .41)$

Relative to all four domains in emotional intelligence, the strongest relationships noted are in the domain of relationship management, with all seven competencies within this domain showing correlations of .41 or higher. Within relationship management, the leadership practice, Focus, in which principals establish clear goals and expectations within the school and then keep those goals and expectations at the forefront of the school's attention, had the highest correlation.

Factor Analysis Results

Three factor analyses were calculated using SPSS and were subsequently analyzed to determine highly related variables or subsets within the constructs measured on the survey—school leadership and emotional intelligence—and to strengthen triangulation of results. These factor analyses utilized a Varimax rotation which, in essence, correlates all questions to all other questions in all possible combinations (Kaiser, 1960). A factor analysis was calculated using all responses to questions on the survey measuring the construct of school leadership. One analysis was calculated using all responses to questions on the survey measuring the construct of emotional intelligence, and one was calculated using all responses from all survey questions measuring both constructs. Within SPSS software, the principal component analysis was utilized as the method of extraction.

Factor analysis results for school leadership practices.

For the factor analysis related to research-based school leadership practices, seven components or factors, with Eigenvalues of 1.0 or greater, were retained (Kaiser, 1960). Component one has an Eigenvalue of 9.67 and accounts for 30.22% of the variance. Component seven has an Eigenvalue of 1.08 and represents 3.38% of the variance. The

seven components have a cumulative variance of 57.85%. Table 14 shows the factors

extracted.

Table 14

Factor Analysis of School Leadership Practices: Total Variance Explained

Component	Total Eigenvalue	% of Variance	Cumulative %
1	9.67	30.22	30.22
2	2.33	7.28	37.50
3	1.62	5.05	42.55
4	1.47	4.61	47.16
5	1.23	3.86	51.02
6	1.11	3.45	54.47
7	1.08	3.38	57.85
8	.99	3.10	60.95
9	.96	2.99	63.94
10	.91	2.83	66.78
11	.82	2.58	69.35
12	.78	2.45	71.80
13	.73	2.28	74.08
14	.67	2.10	76.18
15	.64	1.98	78.17
16	.62	1.94	80.11
17	.58	1.82	81.93
18	.56	1.73	83.66
19	.53	1.67	85.33
20	.50	1.56	86.89
21	.48	1.49	88.38
22	.44	1.37	89.75
23	.43	1.35	91.10
24	.42	1.31	92.41
25	.39	1.23	93.64
26	.38	1.20	94.84
27	.35	1.11	95.95
28	.33	1.04	96.99
29	.30	.93	97.92
30	.25	.77	98.70
31	.23	.73	99.42
32	.19	.58	100.00

Table 15 shows the component matrix listing the correlations for each of the 32

items on the first part of the survey measuring school leadership practices. Items with the

highest positive or negative correlations within each factor, as well as the highest

correlations for each of the 32 survey items across extracted components, were examined

in comprising the descriptions of the seven factors extracted. The highest correlations for

each survey item and component are shaded in the table.

Table 15

Rotated Component Matrix for Part One of the Survey Measuring School Leadership

Survey Item	Components						
	1	2	3	4	5	6	7
1	.394	.117	.218	-.313	.259	.548	.057
2	.291	-.003	-.146	.218	.508	.111	.278
3	.381	.065	-.402	.267	.346	.024	.264
4	.590	.158	-.389	.158	.051	.070	.094
5	.590	.136	.070	-.363	.116	.327	.159
6	.647	.086	.000	-.135	.255	-.085	.009
7	.530	.372	-.418	.145	.074	.000	-.024
8	.638	-.125	.007	.025	.108	.032	-.245
9	.610	-.244	-.085	.222	.139	-.144	-.280
10	.405	.013	-.068	.057	-.066	.171	.149
11	.551	.105	-.282	.047	-.144	.129	-.206
12	.536	.195	-.337	.252	-.078	-.094	-.301
13	.662	-.392	.098	.010	.045	-.111	.134
14	.669	-.200	.046	-.125	-.033	-.169	.190
15	.735	-.293	.070	-.096	.162	-.183	.038
16	.645	-.357	.118	.138	.126	-.168	.098
17	.587	-.330	.061	.107	.090	.173	-.279
18	.627	.017	-.340	.118	.026	.170	-.287
19	.502	-.216	.096	.072	-.371	.381	.037
20	.591	-.453	.177	.031	-.245	.215	-.116
21	.462	-.233	.185	.228	-.229	-.097	.327
22	.541	-.363	.256	-.087	.062	-.112	.005
23	.666	.185	-.055	-.060	-.261	.058	-.002
24	.441	.043	.009	-.420	.171	-.380	-.160
25	.451	.095	-.155	-.461	-.026	-.041	-.108
26	.500	.324	-.018	-.362	-.021	-.062	-.168
27	.562	.136	-.161	-.347	-.225	-.147	.298
28	.568	.172	-.227	.119	-.313	-.083	.214
29	.544	.179	-.184	-.007	-.262	-.123	.138
30	.513	.218	.485	.261	-.093	-.086	-.078
31	.399	.636	.379	.188	.023	-.126	-.124
32	.465	.603	.206	.216	.087	.039	.127

Nineteen of the 21 school leadership practices were identified in factor one. One of the 21 school leadership practices was identified in each of factors two through six. None of the 21 school leadership practices were identified in factor seven based on the method of analysis used (examination of the highest correlation for each item number), however, the highest correlations within that factor suggested one of the 21 school leadership responsibilities.

According to Zwick and Velicer (1982), using the Kaiser method for factor analysis often overestimates the number of factors extracted. The researcher suspects this may be true in the analysis of calculated factors for the data from the present study derived using the Kaiser method in SPSS. According to the way the 285 participants involved in the survey responded, seven factors exist. The first factor is most important and is described as school leadership. In addition to the first factor, the factor loadings suggest that six other tangential factors also exist. Factor two is described as principal visibility specific to interactions with others. Factor three is described as principal resistance to actively challenging the status quo. Factor four is described as lack of advocacy for the school to all stakeholders on the part of the principal. Factor five is described as principal willingness to acknowledge the shortcomings of the school and school staff. Factor six is described as principal willingness to recognize the successes of the school and school staff. Factor seven is described as principal involvement in the design and assessment of student learning.

Factor analysis results for emotional intelligence.

For the factor analysis related to emotional intelligence, five components or factors, with Eigenvalues of 1.0 or greater, were retained. Component one has an

Eigenvalue of 10.09 and accounts for 40.35% of the variance. Component five has an

Eigenvalue of 1.12 and represents 4.46% of the variance. The five components have a

cumulative variance of 63.55%. Table 16 shows the factors extracted.

Table 16

Factor Analysis of Emotional Intelligence: Total Variance Explained

Component	Total Eigenvalue	% of Variance	Cumulative %
1	10.09	40.35	40.35
2	1.84	7.37	47.72
3	1.49	5.95	53.67
4	1.35	5.42	59.09
5	1.12	4.46	63.55
6	.89	3.56	70.37
7	.82	3.26	57.85
8	.74	2.95	73.32
9	.62	2.46	75.78
10	.59	2.34	78.12
11	.56	2.25	80.36
12	.52	2.10	82.46
13	.50	2.00	84.46
14	.48	1.94	86.39
15	.46	1.84	88.23
16	.42	1.68	89.91
17	.39	1.56	91.47
18	.38	1.52	92.99
19	.35	1.38	94.37
20	.32	1.26	95.63
21	.26	1.03	96.66
22	.23	.93	97.59
23	.22	.87	98.46
24	.21	.83	99.29
25	.18	.71	100.00

Table 17 shows the component matrix listing the correlations for each of the 25

items on the second part of the survey measuring emotional intelligence competencies.

Items with the highest positive or negative correlations within each factor, as well as the

highest correlations for each of the 25 survey items across extracted components, were

examined in comprising the descriptions of the five factors extracted. The highest

correlations for each survey item and component are shaded in the table.

Table 17

Rotated Component Matrix for Part Two of the Survey Measuring Emotional Intelligence

Survey Item	Components				
	1	2	3	4	5
33	.534	.526	.022	.291	.087
34	.580	.660	-.083	-.066	-.098
35	.588	.525	-.070	-.084	-.193
36	.477	.647	-.154	-.179	-.019
37	.601	.065	.090	.252	.250
38	.478	-.028	.493	.157	.239
39	.554	-.188	.310	.192	-.364
40	.615	.088	.252	.459	.233
41	.680	.020	.250	.333	.150
42	.618	-.254	.075	.257	-.229
43	.720	-.218	.039	.104	-.192
44	.535	-.033	.316	-.529	.216
45	.575	-.009	.216	-.355	.456
46	.591	-.030	.360	-.207	-.043
47	.560	-.043	-.183	.165	-.158
48	.683	-.051	-.145	.061	-.170
49	.662	.094	-.200	.074	-.105
50	.742	-.021	.044	-.193	-.135
51	.752	-.121	-.329	-.020	.071
52	.676	-.156	-.394	-.079	.230
53	.696	-.227	-.330	-.022	.148
54	.658	-.298	-.423	.123	.234
55	.737	-.149	-.110	-.191	.092
56	.736	-.135	.108	-.295	-.296
57	.703	-.201	.155	-.184	-.269

Sixteen of the 19 emotional intelligence competencies were identified in factor

one. One of the 19 emotional intelligence competencies was identified in factor two and

one was identified in factor three. None of the 19 emotional intelligence competencies

were identified in factors four and five based on the method of analysis used

(examination of the highest correlation for each item number), however, the highest

correlations within those factors suggested one of the 19 emotional intelligence competencies.

The researcher again suspects that the number of factors extracted in the factor analysis calculated using the Kaiser method in SPSS might have been overestimated. According to the way the 285 participants involved in the survey responded, five factors exist. The first factor is most important and is described as emotional intelligence. In addition to the first factor, the factor loadings suggest that four other tangential factors also exist. Factor two is described as being self-aware of one's emotions. Factor three is described as control of one's emotions. Factor four is described as difficulty in seeing the positive side of difficult people and situations. Factor five is described as difficulty in viewing unexpected situations as opportunities rather than threats.

Factor analysis results for school leadership practices and emotional intelligence.

For the factor analysis related to both research-based school leadership practices and emotional intelligence, 13 components or factors, with Eigenvalues of 1.0 or greater, were retained. Component one has an Eigenvalue of 17.32 and accounts for 30.39% of the variance. Component 13 has an Eigenvalue of 1.04 and represented 1.82% of the variance. The thirteen components have a cumulative variance of 64.73%. Table 18 shows the factors extracted.

Table 18

Factor Analysis of Emotional Intelligence and School Leadership Practices: Total Variance Explained

Component	Total Eigenvalue	% of Variance	Cumulative %
1	17.32	30.39	30.39
2	3.56	6.24	36.62
3	2.05	3.60	40.23
4	1.90	3.32	43.55
5	1.74	3.05	46.60
6	1.59	2.80	49.40
7	1.53	2.68	52.07
8	1.48	2.60	54.67
9	1.32	2.32	56.99
10	1.23	2.16	59.15
11	1.10	1.94	61.08
12	1.05	1.83	62.92
13	1.04	1.82	64.73
14	.97	1.69	66.43
15	.90	1.57	68.00
16	.87	1.52	69.52
17	.86	1.51	71.03
18	.81	1.43	72.46
19	.75	1.31	73.77
20	.73	1.27	75.05
21	.70	1.22	76.27
22	.69	1.21	77.48
23	.67	1.17	78.65
24	.64	1.12	79.77
25	.60	1.05	80.82
26	.59	1.04	81.86
27	.58	1.01	82.87
28	.56	.98	83.85
29	.53	.92	84.78
30	.51	.89	85.66
31	.49	.86	86.52
32	.47	.82	87.34
33	.46	.81	88.15
34	.44	.76	88.92
35	.43	.75	89.67
36	.41	.72	90.39
37	.40	.70	91.09
38	.39	.68	91.76
39	.38	.66	92.42
40	.35	.61	93.04
41	.35	.61	93.64
42	.33	.58	94.22
43	.31	.55	94.76
44	.30	.52	95.28
45	.29	.51	95.79
46	.29	.51	96.30
47	.27	.47	96.77
48	.26	.46	97.22
49	.23	.41	97.63
50	.22	.39	98.02
51	.21	.36	98.39
52	.19	.33	98.72
53	.17	.29	99.01
54	.16	.28	99.29
55	.15	.27	99.55
56	.14	.25	99.81
57	.11	.19	100.00

Table 19 shows the component matrix listing the correlations for each of the 57 items on the entire survey measuring school leadership practices and emotional intelligence competencies. Items with the highest positive or negative correlations within each factor, as well as the highest correlations for each of the 57 survey items across extracted components, were examined in comprising the descriptions of the thirteen factors extracted. The highest correlations for each survey item are shaded in the table.

Table 19

Rotated Component Matrix for Complete Survey

Survey Item	Components												
	1	2	3	4	5	6	7	8	9	10	11	12	13
1	.348	.085	.360	.045	-.350	-.178	.016	.174	.091	.135	.041	.456	.064
2	.240	.196	.101	.132	.219	-.120	-.087	.116	.272	-.165	.359	.201	.526
3	.329	.193	.177	.093	.518	-.228	-.186	.131	.117	-.095	.030	.068	-.208
4	.545	.117	.172	.084	.403	-.236	.148	.050	.077	.134	-.088	.075	-.142
5	.576	.048	.188	.073	-.306	-.249	-.086	.225	-.066	.046	-.151	.214	.073
6	.587	.185	.119	.229	-.052	-.139	-.034	.252	.103	-.139	-.027	-.222	-.085
7	.508	-.033	.311	.418	-.139	.166	-.038	-.144	.026	-.033	.182	-.094	-.065
8	.566	.316	.026	.045	-.132	-.168	.009	-.141	.119	-.200	-.119	-.131	-.022
9	.545	.363	-.065	-.024	.097	-.041	.095	-.218	.081	-.352	-.013	-.082	.036
10	.382	.089	-.154	.171	.030	-.004	.062	.021	.110	.094	-.447	.058	.421
11	.570	.013	-.010	-.083	.184	-.156	.085	-.087	.063	.109	.004	.105	.129
12	.545	-.034	.089	-.017	.362	-.129	.330	-.251	.069	-.002	.062	-.031	-.040
13	.565	.492	-.073	-.029	-.043	.184	.026	.110	.020	-.032	-.018	.080	-.123
14	.629	.289	-.118	.009	-.062	.109	.062	.173	-.125	-.030	-.136	.103	-.126
15	.626	.455	.007	.041	-.087	.059	.175	.163	-.054	-.174	-.046	.047	-.079
16	.535	.499	.062	.008	.021	.210	.044	.061	.013	-.150	-.029	-.001	.064
17	.521	.393	.043	-.163	-.083	.097	.002	-.064	.340	.001	-.014	-.155	-.027
18	.597	.141	-.018	.016	.172	-.297	.169	-.118	.168	-.045	-.215	.016	-.034
19	.451	.321	-.058	-.102	-.112	.076	-.110	-.172	.149	.548	.155	-.022	-.007
20	.496	.512	-.052	-.182	-.214	.143	-.021	-.146	.130	.292	.060	-.150	-.066
21	.392	.356	-.106	.140	.031	.226	-.065	-.203	-.324	.043	-.040	.202	-.072
22	.415	.473	.099	-.014	-.183	.225	.206	.105	-.181	-.123	-.067	.092	.043
23	.648	.054	.071	.126	-.027	-.151	.078	-.094	-.225	.218	-.072	-.008	.024
24	.460	-.008	-.063	-.037	-.157	-.036	.235	.281	-.130	-.215	.359	-.257	.041
25	.430	.051	-.034	.033	-.164	-.349	.134	.187	-.123	.128	.172	-.323	-.036
26	.537	-.170	.079	.092	-.149	-.230	.139	.123	-.147	-.034	.019	-.010	-.156
27	.585	-.027	-.081	.015	-.006	-.124	.031	.270	-.286	.258	.082	-.050	.012
28	.542	.076	.055	.135	.266	-.102	-.052	-.081	-.174	.287	-.124	-.165	.076
29	.537	.034	.061	.061	.159	-.184	-.004	-.106	-.350	.099	-.085	-.131	.266
30	.472	.055	.352	.298	-.158	.298	.021	-.310	-.101	-.032	.008	-.050	.076
31	.452	-.355	.250	.520	-.072	.188	-.021	-.173	.060	-.012	.188	-.132	-.025
32	.494	-.267	.248	.543	.045	.072	-.050	-.055	.152	.106	.088	.087	-.084

table continued

table continued

Survey Item	Components												
	1	2	3	4	5	6	7	8	9	10	11	12	13
33	.495	-.188	.375	-.300	.219	.248	.043	.098	-.046	-.070	-.005	-.070	.135
34	.544	-.186	.508	-.423	.010	.028	-.087	.033	.096	-.015	-.017	-.063	.052
35	.540	-.215	.365	-.341	-.125	.074	-.127	.020	-.064	-.019	-.131	-.074	.006
36	.448	-.126	.476	-.488	-.076	-.034	-.094	-.050	.067	.049	-.029	-.083	.004
37	.570	-.148	-.006	-.111	.087	.183	.076	.110	.072	.134	.312	.184	.010
38	.429	-.251	-.144	-.021	.036	.228	.435	.170	-.036	-.013	.146	.249	.109
39	.505	-.273	-.181	.167	.090	.111	.043	.229	.230	-.021	-.167	-.111	-.087
40	.576	-.214	-.022	-.064	.345	.336	.184	.145	-.055	.179	-.001	-.006	-.145
41	.617	-.259	-.120	-.104	.230	.237	.158	.158	.004	.033	-.095	.009	-.078
42	.589	-.079	-.299	.022	-.099	.201	-.130	.236	.246	.161	-.085	-.164	.190
43	.668	-.190	-.234	.046	-.036	.138	-.157	.072	.246	-.065	-.088	-.128	.069
44	.485	-.291	-.143	-.129	-.277	-.242	.359	-.249	.018	-.010	-.016	.027	.017
45	.546	-.169	-.107	-.119	-.055	-.017	.328	-.385	-.018	-.097	.125	-.010	-.057
46	.501	-.389	-.169	-.074	-.133	.090	.216	-.135	-.016	-.037	-.153	.009	.136
47	.513	-.206	-.075	.050	.070	.156	-.297	-.020	-.330	-.082	-.055	-.066	.221
48	.643	-.231	-.062	.040	-.031	-.045	-.249	.109	-.091	-.100	.050	-.095	-.005
49	.610	-.229	.048	-.082	.115	.026	-.220	.027	-.221	-.221	-.122	.082	-.123
50	.672	-.338	-.039	-.038	-.123	-.057	-.097	-.029	.040	-.049	-.055	.204	-.143
51	.758	.039	-.114	-.069	-.040	.016	-.251	-.029	-.032	-.130	.010	.126	-.109
52	.660	.031	-.211	-.183	.063	-.025	-.271	-.245	-.043	-.067	.128	.138	-.072
53	.706	.057	-.215	-.089	-.008	-.112	-.209	-.054	-.022	.036	.215	.033	-.024
54	.693	.210	-.309	-.070	.140	-.029	-.262	-.054	-.108	-.007	.183	.031	-.018
55	.711	-.140	-.198	-.065	-.021	-.174	-.051	-.132	-.025	-.109	.142	-.036	.193
56	.650	-.393	-.152	.037	-.208	-.120	-.130	-.055	.122	-.054	-.080	.078	-.043
57	.647	-.284	-.188	.070	-.117	-.043	-.063	-.012	.203	.054	-.049	.069	-.178

When the survey is combined, the majority of questions load on the first, most important factor, which is described as emotionally intelligent school leadership practice. Twelve other factors were also extracted. Factor two is described as principal beliefs and actions about effective schooling. Factor three is described as principal self-awareness. Factor four is described as principal visibility without principal self-awareness. Factor five is described as principal willingness to actively challenge the status quo. Factor six is described as lack of advocacy for the school to all stakeholders on the part of the principal. Factor seven is described as emotional self-control. Factor eight is described as difficulty in viewing unexpected situations as opportunities rather than threats. Factor nine is described as situational awareness. Factor ten is described as principal involvement in the design and assessment of student learning. Factor 11 is described as

inability to protect instructional time and focus. Factor 12 is described as principal willingness to recognize the successes of the school and school staff. Factor 13 is described as principal willingness to acknowledge the shortcomings of the school and school staff.

It is possible that the number of factors extracted in the factor analysis calculated on the complete survey using the Kaiser method in SPSS may have been overestimated. The researcher observes that, according to the way the 285 participants involved in the survey responded, one major factor exists, which is described as emotionally intelligent school leadership practice. The other factor loadings suggest that perhaps 12 other tangential factors may also exist as described above. The factor analysis provides an additional source of validity as the 13 factors extracted from the survey align closely with the 21 research-based school leadership practices and the four domains and 19 competencies of emotional intelligence.

The three factor analyses confirm the variables measured on the survey are highly related and multicollinearity may be present. Multicollinearity is likely not problematic, however, due to both the large sample size reflected in the survey data and that the survey was intentionally designed to reflect two major variables supported by the literature review and selected to serve as the theoretical framework for the study—emotional intelligence and research-based school leadership practices. In cases such as this, according to Cohen et al. (2003), understanding the nature and explaining the source of the multicollinearity is the appropriate focus. Because the research-based school leadership practices are so highly related and because the emotional intelligence domains and competencies are so highly related, this results in the overall strong correlation of .73

between emotional intelligence and engagement in research-based school leadership practices. The strength of the relationship between the group of variables within emotional intelligence and research-based school leadership practices provides evidence of power within the observed results.

Description of Demographics Related to Sample Selected for Follow-up Interviews

Eleven principals were selected to participate in follow-up interviews from the sample of 285 participants who completed the survey. To select the principals, the total scores for all 285 survey participants from the research-based school leadership practice part of the survey and from the emotional intelligence part of the survey were rank ordered from highest total scores to lowest totals scores. Principals nearest the top of the rank order in both the research-based school leadership practice totals and the emotional intelligence totals, and who indicated a willingness to participate in a follow-up interview on the electronic survey, were selected and interviewed until such point that saturation was achieved with strong, repeated patterns clearly evident in the data.

For the eleven principals interviewed, the range of total scores on the research-based school leadership practices portion of the survey was 279-303. The mean sum score was 289.9 with a standard deviation of 8.2. The range of total scores for interview participants on the emotional intelligence portion of the survey was 221-245. The mean sum score was 238 with a standard deviation of 7.5. The range of total scores for all 285 participants in the survey for the research-based school leadership part was 151-303. The mean score was 253.7 with a standard deviation of 25.8. The range of total scores for all 285 participants in the survey for the emotional intelligence part was 166-245. The mean score was 211.6 with a standard deviation of 17.0.

Of the 11 principals in the interview sample, 27.3% ($n = 3$) were male and 72.7%

($n = 8$) were female. Elementary principals comprised 54.5% ($n = 6$) of the respondents,

36.4% (4) served as middle school or junior high principals, and one of the 11

interviewed (9.1%) served as a K-12 principal. Approximately 18 percent of the

respondents ($n = 2$) to the survey served as a principal for one to five years, 36.4% ($n = 4$)

served for six to ten years, 9.1% ($n = 1$) served for 11-15 years, 27.3% ($n = 3$) served for

16-20 years, and 9.1% ($n = 1$) served for more than 20 years as a principal.

Approximately 27 percent of principals ($n = 3$) responding to the survey served in small,

rural districts with less than 1,500 students and 72.7% ($n = 8$) served in mid-sized

districts with 1,500-10,000 students. Table 20 provides a summary of demographic data

for the principals selected for follow-up interviews.

Table 20

Demographic Summary for Interview Participants

Gender	Number	Percent
Male	3	27.3
Female	8	72.7
Type of School Served		
Elementary	6	54.5
Middle School or Junior High	4	36.4
K-12	1	9.1
Number of Years Served		
1-5	2	18.2
6-11	4	36.4
11-15	1	9.1
16-20	3	27.3
20+	1	9.1
Size of District Served		
Rural < 5,000 students	3	27.3
Mid-sized 1,500-10,000 students	8	72.7

Table 21 provides a summary of interview participants' scores on the survey measuring emotional intelligence and engagement in research-based school leadership practices, which determined their selection for participation in the follow-up interviews.

Table 21

Summary of Survey Scores for Interview Participants

Participant	Emotional Intelligence Score	School Leadership Practices Score
A	245	303
B	245	296
C	245	289
D	244	295
E	243	288
F	238	301
G	236	291
H	236	282
I	233	281
J	232	283
K	221	279

Findings Related to Research Question Three

The third research question was: What insights can school leaders who demonstrate high levels of the identified emotional intelligence competencies and engagement in research-based school leadership provide into their formation as leaders and their leadership practice? To investigate this question, narrative responses from transcriptions of follow-up interviews with 11 principals were coded and analyzed using the method of constant comparative analysis. Each interview transcript was read, and transcripted text was highlighted according to its relevance related to either leadership formation or insight into leadership practice. Subsequent reading of the transcripts involved coding by use of descriptive notations in the margins of the transcripts.

Highlighted and notated transcripts were analyzed for emergent themes regarding principals' insights into their formation as emotionally intelligent leaders as well as insights into their leadership practice. One Excel spreadsheet was used to record leadership formation themes found in the analysis in addition to specific, supporting quotes from interview transcripts. Another Excel spreadsheet was used to record specific examples of leadership practice within each of the four domains of emotional intelligence in addition to supporting quotes from interview transcripts. Interview participants were assigned a number, which was recorded on the spreadsheet along with the transcript line numbers from the recorded supporting quotes.

Further reading and analysis of transcripts and emergent themes allowed the researcher to collapse categories identified in the coding process yielding broader, more inclusive themes. Clear, repetitive patterns became evident in the data suggesting to the researcher that saturation had been achieved. Following these steps, a peer debriefer assessed the process used and verified the subsequent themes and categories identified by the researcher from coding, comparing, and analyzing the interview data. Use of the peer debriefer helped establish reliability of the qualitative research phase of the study.

After providing brief background information on each of the 11 principals interviewed, this section will report the findings from the constant comparative analysis with regards to leadership formation and emotionally intelligent school leadership practice. Pseudonyms were assigned to each principal interviewed to protect his or her anonymity.

Background Information on Principals Interviewed

The first principal, Michael, serves as an elementary principal in a mid-sized school district with student enrollment between 1,500 and 10,000. He has been a principal for between one and five years. The interview was face-to-face. Michael acknowledged having a strong work ethic and wanting to be a strong person in spite of the fact that others had lower expectations of him throughout his own school experience. He is married with three small children and strives to find balance between his work and home life. If he were hiring a school principal, he would seek someone who is an optimist, knows every child by name, believes every child can succeed, is willing to be a teacher, and is focused on learning.

The second principal, Julie, serves as a middle school principal in a mid-sized school district with student enrollment between 1,500 and 10,000. She has been a principal for between 16 and 20 years. The interview was face-to-face. Julie is dyslexic and shared she was very aware of her own delayed development and different-ness as a learner as a child. At the end of her career as a public school principal, Julie reflected that she always tried to celebrate differences in others and to view those differences as strengths in a team approach. She was encouraged by her superintendent to pursue educational administration. Julie began her administrative career in a "really rough" school and worked hard to change the culture to one that was collaborative and focused on student learning. If she were hiring a school principal, Julie would seek someone who values the uniqueness of children and teachers, who welcomes and supports risk-taking, who makes the school environment safe in which to make and learn from mistakes, who

knows learning and pays attention to it, and who facilitates the growth and cohesiveness of individuals and the school team.

The third principal, Dawn, serves as an elementary principal in a small, rural district with student enrollment less than 1,500. She has been a principal for between 16 and 20 years. The interview was conducted over the telephone. Dawn described herself as a person who has always been emotionally intelligent though she did not always realize there was a name for it. She believes being emotionally intelligent was a vital part of her success in her life and career. She tried to model emotional intelligence for others and worked to cultivate "I-thou" kinds of relationships. If Dawn were hiring a school principal, she would seek someone who is genuine, honest and has integrity, who is competent, communicates well, and who others can trust to do the right thing.

The fourth principal, Ann, is an elementary principal who serves in a mid-sized district with student enrollment between 1,500 and 10,000. She has been a principal for between six and ten years. The interview was conducted over the telephone. Ann acknowledged her leadership style developed over time from "bits and pieces" of others and of her studies related to leadership. She views her school as a community and speaks of her staff as family. A female superintendent was instrumental in Ann pursuing her doctorate and becoming a principal. If Ann were hiring a school principal, she would seek someone who is empathetic, who is sensitive but at the same time can make tough decisions, who has the best interests of children at his or her core, who knows and remembers well what it is like to be a teacher, who is supportive, who is a visionary, and who is a team player.

The fifth principal, Paul, is an elementary principal who also serves in a mid-sized district with student enrollment between 1,500 and 10,000. He has been a principal for between one and five years. The interview was conducted over the telephone. Paul grew up in a loving home, the child of a career Army officer. Paul was discouraged from attending college and others underestimated his talents. He had a number of other career experiences before becoming a principal: being a teacher, a youth group director, and an athletic director. Paul's passion for service was clearly evident as we talked. He exuded a spirit of humility and spoke of the influence of faith on his leadership. Paul shared his own doctoral work, which culminated in dissertation research on servant leadership related to public school superintendents. At age 54, Paul does not envision retiring any time soon. He admitted, "As a matter of fact, I'm just starting to get it!" If Paul were hiring a school principal, he would seek a candidate who was "incredibly honest," who would desire to help teachers become the best they can be, who can maintain passion, who is hungry for knowledge, who understands the importance of relationships with their celebrations and challenges, who has empathy, compassion, and a vision for serving people rather than a predetermined plan for leadership.

The sixth principal, Lois, is an elementary principal who serves in a mid-sized district with student enrollment between 1,500 and 10,000. She has been a principal for more than 20 years. The interview was conducted over the telephone. Lois acknowledged experiences both in a healthy school district culture and in a toxic school district culture. She admits to always being a relationship person, which is why the change in district leadership that resulted in toxicity was such a struggle for her. Lois talked about how important laughter and congeniality are in the school environment. If Lois were hiring a

school principal, she would seek someone who understands how children learn, who works hard, who reaches out to students and staff, and who realizes schools must be places of caring to be places of learning.

The seventh principal, Amy, is an elementary principal who serves in a mid-sized district with student enrollment between 1,500 and 10,000. She has been a principal for between 16 and 20 years. The interview was conducted over the telephone. Amy studied eastern religion and found in that study a sense of inner strength. She shared that not wanting to live in poverty anymore was an influential factor in her development as a person and leader. As she stated, "it probably was living with the negative that created the need to be more positive." She believes teachers do not reflect enough, and she tries to structure regular opportunities for them to engage in reflection. If Amy were going to hire a school principal, she would seek someone who has a passion for what they do, who believes in shared leadership, who has strong communication skills and a strong sense of advocacy, who is compassionate, and who has a strong belief system that educators make a difference in the lives of children.

The eighth principal, Jane, is a K-12 principal serving in a small, rural district with student enrollment less than 1,500. She has been a principal for eight years. The interview was conducted over the telephone. Jane is an avid reader who, if she were to give advice to aspiring leaders, would be telling them to continue to read and research every day and then try to apply what they learn to their situation. Jane noted her "natural leadership skills" surfaced while growing up on a farm with three older siblings. Her sense of humor and playfulness were evident during the interview. When Jane was a teacher, she had a principal who encouraged her to pursue educational administration.

Jane tries to keep herself mentally and physically healthy and believes that finding balance between work and play makes her a better leader. She admits to being told that she can be "bull-headed" at times. She purposefully chooses to be very involved in the community where she serves as a principal. If Jane were to hire a school principal, she would seek someone who is personable, understands children and where they are coming from, practices what they preach, leads meaningful staff development, is competent and confident, can roll with the punches, knows best practice and current research in teaching and learning, and who treats people fairly, if not equally.

The ninth principal, Judy, is a middle school principal who serves in a small, rural district with student enrollment less than 1,500. She has been a principal for between six and ten years. The interview was conducted over the telephone. Judy's mother, along with two other female mentors, was very influential in Judy's leadership development. She is the middle child of five siblings. Judy values and devotes time appropriately to working with teachers on goal setting and evaluation. She enjoys the individual dialogue that happens during this process and the growth that results from building strong relationships with her faculty. If Judy were hiring a school principal, she would seek someone who protects teacher time, who keeps others growing, who makes meetings meaningful, who has energy, passion and love for what they do, who works to create a positive culture and climate, who listens to others, who laughs and celebrates with others, who works hard, and who plays hard.

The tenth principal, Beth, is a middle school principal who serves in a mid-sized district with student enrollment between 1,500 and 10,000. She has been a principal for eight years. The interview was conducted over the telephone. Beth was successful in

bringing together a very diverse staff. She models her belief that she is here to serve

others and to make the job of teaching easier. Beth also believes principals must take care

of themselves emotionally. She has two children and acknowledges she could not have

the job she does and do it well if it were not for her supportive husband. If Beth were

hiring a school principal, she would seek someone who is a listener, who knows what it

takes to be a master teacher, who teaches to the "outliers," who fosters growth and

development of teachers, and who demonstrates strong instructional leadership.

The eleventh principal, Steve, is a middle school principal serving in a mid-sized

district with student enrollment between 1,500 and 10,000. He has been a principal for

between 11 and 15 years. The interview was conducted over the telephone. Steve's

parents were educators and were influential in his development as a leader. Steve's

experiences with scouting, his church youth group, and Christian camping were also

influential. Steve believes visibility is very important, and he strives to be very involved

in his community. He believes a spirit of service is essential to effective school

leadership. Steve shares humor at work and regularly sends positive notes to both

students and staff. If Steve were hiring a school principal, he would seek someone with a

strong work ethic who understands children's development, who is honest, has integrity,

and is involved. He would seek someone who is a good communicator, who has passion

for teaching, who is good at teaching, who has vision, and who gets others to lead

without burning them out.

Principals' Insights into Leadership Formation

Seven primary themes related to factors that influenced the formation of the

emotionally intelligent school leaders interviewed became apparent from the constant

comparative analysis: 1) personal goal and experience, 2) role model, 3) family, 4) faith and spirituality, 5) adversity and hardship, 6) encouragement of others, and 7) the study of leadership. In this section, each of these themes will be reported and supported by interviewees' narrative responses.

The influence of personal goal and experience.

The theme of personal goal and experience encompasses influences such as the desire to have impact, to influence what happens within the school setting, or to leave a legacy. This theme also includes influences mentioned by those principals who stated a desire to grow and fulfill their potential as individuals. For some principals, life's circumstances and experiences positioned them for leadership development. The theme of personal goal and experience was an influence on leadership formation noted by ten (90.9%) of the interviewees.

Three principals noted personal experiences that lead them to a desire for influence as a factor. Julie stated, "I realized I could not influence it unless I did the leadership role . . . I figured it [poor practice which was status quo] could be changed." Amy said,

> I moved into a first grade classroom and I was a good teacher. And so I thought, "well, if I could do this with 25 kids every year, I could move into administration and do it with 25 teachers and influence many more children's lives."

For Jane, the weariness from being a teacher experiencing the revolving door of leadership lead to a desire for influence and stability in the school leadership role:

I was a teacher for eight of those years before I became principal. In those eight

years, I think we probably had maybe four or five principals and I just got really

tired of you know, the whole revolving door syndrome.

Paul discussed personal experiences that lead him to a sense of service to others, a

sense of legacy, and a sense of personal humility. Paul acknowledged that his coming

into leadership was about "attempting to be the leader that I felt I should be, very much

desiring to be a leader that serves people." Two other principals mentioned servant

leadership as an influence on their development. Later, Paul added,

Now, unfortunately, none of those people are in my life professionally, but it is

my turn to, in my own way . . . I do not have the reputation that any of them have,

nor will I, I don't think, but yet I have the privilege to do what they did. And that

is really shepherd and lead and influence wonderful people . . . [the elementary

principal experience has] inspired me to say you need to be more than just a

person about the building, working hard, and encouraging people. You need to

gain an understanding of what it means to have this practice—what it means to be

able to collaborate, and when you don't know it, to provide the resource. So

building that relationship with staff so that as you treat each child with meeting

their individual needs. . . . you take your staff and you let them see you and you

truly give them what you can.

Paul summarized how these personal experiences have influenced his leadership

development stating,

> I've really been in a stage of growth continuously through my career so it's forced
>
> me to think of other people, to understand them, to be patient with them, and to
>
> grow with them . . . it's not about me, but about how fortunate I've been.

Two principals mentioned specific experiences as teachers of special education that lead

them to goals related to pursuing leadership opportunities that would impact students

with special education learning needs. Other principals interviewed mentioned personal

goals of wanting to be a strong person, of wanting to pursue higher levels of learning via

advanced degrees, and of wanting to reach one's full potential by maintaining a strong

work ethic as influences on leadership development.

Most of the 11 principals interviewed pointed to either personal development

goals or life experiences that shaped who they became as emotionally intelligent leaders.

The desire to have influence, to serve with humility, to leave a legacy, and to become the

best they could be seem to be particularly important to their formation as leaders. The

theme of personal goal and experience was not, however, the only influence noted by the

principals interviewed.

The influence of role model.

The next most frequently mentioned influence was role model. The influence of

role model involves both positive and negative examples set by others. Those others were

identified as colleagues, principals, superintendents, mentors, college professors, and

people in positions of leadership. Role model was an influence on leadership formation

shared by nine (81.8%) of the principals who were interviewed. For most principals, this

role model influence was positive; for a few others it was a negative role model and a

consequent desire *not* to be that kind of leader. For one principal, it was both positive and negative role modeling that made the difference in influencing leadership development.

 For nine of the eleven principals interviewed, positive role modeling provided by a mentor or significant other was mentioned as influential in their development as emotionally intelligent leaders. Superintendents and principals were mentioned most frequently as mentors with significant influence. As Paul affirmed,

> Once again I got to lead (and I didn't know it at the time) with the principal who would later become the national Superintendent of the Year. He became the Principal of the Year. And he saw in me potential, knowing that I would make a lot of mistakes. But, he saw my heart and he saw my desire to serve and lead. So I was able to work with him for ten years. . . . just a phenomenal guy.

Later in the interview, Paul added, "I've been blessed to be surrounded by people who did two things: they showed me the way and they said to me, 'I believe in you'." Judy shared this about the influence of her mentors:

> I've been blessed with two outstanding mentors. They happened to be two women. . . . I believe both women, as I reflect, demonstrated knowledge in terms of curriculum and assessment like the nuts and bolts of instruction. And equally important, they were able to balance relationships with people. When I say "people" that includes parents, teachers, and kids. How did they do that? Number one is, and I hope I model this, [they made] an effort to get to know the people. It's not just what they are wearing. It's not where they live.

Coworkers, college professors, and other leaders were also mentioned during the interviews as being impactful in terms of positive role models that influenced leadership development. One principal cited the influence of Scout leaders experienced in his youth:

> You know, this also sounds probably somewhat cheesy, but being involved in scouting as a kid. There was an institution that taught me a lot about who I was and how to lead other kids at a really young age and how to be responsible and make decisions. When you're up in the mountains and some kid gets injured, you need to take that responsibility on pretty quickly at a younger age. It was a very, very good place for me and really had a lot of strong influence.

Clearly, the role modeling that teachers, educational leaders, mentors, coworkers, and others in positions of leadership provided was influential in the leadership development of the principals who participated in the interviews. In most cases, the role model was positive, however, even negative role models were influential in their development as school leaders.

The influence of family.

The next most frequently mentioned influence on leadership development was family. The theme of family is defined as mothers, fathers, and siblings. Family was stated as an influence on leadership formation by seven (63.6%) interviewees. For three of the seven, birth order and related sibling competition and responsibility was noted as a family influence. For two of the seven, a mother's influence was noted. For two of the seven, a father was instrumental in the principals' leadership development. Four of these seven principals stated that both parents were influential in their leadership development as evidenced by this comment:

That's all part of this drive now of giving back to my parents, and all those people

that were just encouragers that said, "You're average in many ways but you've

been given gifts, maximize those gifts whatever you choose to do."

Family members and familial relationships were responsible for influencing leadership

development of more than half of the principals interviewed.

The influence of faith and spirituality.

The influence of faith and spirituality includes personal faith in a higher being, the

study of religion, the practice of spirituality, and for one principal, being an ordained

minister. Faith and spirituality was a leadership formation influence mentioned by five

(45.5%) principals participating in the follow-up interviews. This influence manifested

itself in many forms: involvement in formal religion and church; exploration of eastern

philosophy; the practice of general spirituality; and even a sense of "Catholic guilt" in not

being the best leader one was supposed to be. As Steve shared,

Another part was church. I was very active in youth groups and leadership roles at

a young age in church. From the time I was a senior in high school and all the

way through college I was working at camps all summer, at a Christian camp . . .

when I got into the teaching profession, I already had a depth . . . these kids show

up on a Sunday morning and you're with them 24 hours a day 'til Friday night and

then you have a day off and it comes again, and you do that all summer long for

five straight years, you get pretty patient. You get really tired and it wears you

down. But it's the message and just the people you work with are such great

people. Those people had a real strong faith background and that was a big

influence on me.

This sense of greater purpose that five principals shared as being influential on their leadership development is exemplified in the statement by Judy:

> You know, we have a greater purpose in life and you need to know that. These are children's lives. It's not just As, Bs and Cs; it's their lives. I think that has been profound for me. To keep that in the back of my mind. I think, too, on a personal note . . . it's been a while, but in 1991, I lost my father and a really good friend within seven days. It was pretty traumatic. And I think that there was a lot of growth on where I was with my spirituality. And I think your inner strength and knowing that—it keeps things in perspective because life can be very, very short.

Whether it was Christianity, Eastern religion, or something else, faith and spirituality on the part of the principals interviewed was influential on their leadership development.

The influence of adversity and hardship.

The influence of adversity and hardship relates to represented difficulties in the lives of the principals interviewed or obstacles that needed to be overcome. Adversity and hardship was an influence on leadership formation noted by four (36.4%) of the interviewees. Three of these principals mentioned being mistreated as a follower, being written off because of a disability, or being put down by someone in a leadership role who did not think you had much potential were factors influencing their leadership development. Michael stated, "I'm going to get into education because I don't want anyone to be treated this way—everyone has a chance." Julie shared, "It was such a trying time for me and I thought, 'it doesn't have to be that way'." For the principals who noted this category of influence, overcoming obstacles of poverty and the status quo,

along with a sense of determination surrounding the notion that everybody has a chance

to be better, to be the best, and to lead, were significant factors in their development.

The influence of encouragement of others.

The theme, influence of encouragement of others, relates to those individuals who

made supportive comments or took supportive action on behalf of the principals who

mentioned this influence. Encouragement of others was an influence on leadership

formation shared by four (36.4%) of the principals who were interviewed. This

encouragement came from several sources. A caring spouse was mentioned by two of the

four principals. A mentor was the source of encouragement for another of the four and

people, in general, along life's path were noted by the last of the four principals in this

category.

The influence of the study of leadership.

The theme, influence of the study of leadership, involves actions taken on the part

of principals to learn more about leadership and then apply that learning to their

leadership situations. The study of leadership was an influence mentioned by four

(36.4%) of the principals participating in follow-up interviews. The study of leadership

took several forms: professional reading on leadership, taking leadership courses,

reflecting on job-embedded leadership learning experiences, and discussing leadership

with colleagues. "I read a lot," said one principal, "I try to practice what I preach."

Another shared that "Sitting with those four superintendents was the most educational

experience of my life because they welcomed me and allowed me to just listen and ask

questions and talk and call and you know, all of them had achieved great things."

Learning more about leadership impacted the development of leadership in the principals who mentioned this category of influence.

Table 22 provides a summary of the leadership formation influence themes identified by the 11 interview participants.

Table 22

Summary of Leadership Formation Influences

Influence	Percent of Participants Identifying
Personal Goal and Experience	90.9
Role Model	81.8
Family	63.6
Faith and Spirituality	45.5
Adversity and Hardship	36.4
Encouragement of Others	36.4
Study of Leadership	36.4

Principals' Insights into Emotionally Intelligent School Leadership Practice

The 11 principals who participated in follow-up interviews provided numerous insights into what emotionally intelligent leadership looks like in their day-to-day school leadership practice. Their narrative responses were coded and categorized according to the four domains of emotional intelligence: self-awareness; self-management; social awareness; and relationship management. This section will detail examples from their narrative responses that demonstrate the manifestation of emotional intelligence in school leadership practice.

School leadership practices exemplifying self-awareness.

Five of the 11 principals interviewed mentioned leadership practices that helped them excel in the emotional intelligence domain of self-awareness. Self-reflection was a key leadership practice mentioned. Michael stated:

The whole part of constant reflection—thinking about "where do I really want to be, what do I want to be doing, am I really doing what I'm supposed to be doing?" I got to go back and I got to check everything again and I have to think everything over and am I really doing what I'm supposed to be or what I would want to do?

Another key practice shared was that of assessing and understanding one's strengths and challenges as well as recognizing that leadership is not a lone venture. Paul put it this way, "I've come to realize I will never be that single piece." Later this same principal stated,

I've come to realize what is needed, and at times almost brings tears to my eyes, that I'm not complete enough, that I believe those of us that are called to do what we do now, we really do need to be more complete and so we [need to] do an honest assessment of our gifts and talents.

School leadership practices exemplifying self-management.

All 11 principals shared examples of how they attempt to manage themselves and their emotions in ways that advance their leadership work. Related to the competency of emotional self-control, several strategies were noted by principals. One strategy was being intentional about separating the at-work self from the at-home self. Michael shared that living 15 minutes away from the office was helpful:

People say, "Why do you live 15 minutes out of town?" And to me, that is the reason I live 15 minutes out of town. I drive 15 minutes to get there and once I'm there, to drive back into town, I can't do it. It's too far, it costs too much money, too much gas. You know I've just created this barrier that once I'm there, I'm there. My wife will joke and she'll say, "You're so different when you're at

school." Exactly! That's what I want because when I'm home I put on my old crummy jeans or my farmer pants and my farmer boots and I work on stuff and I putz with stuff and I play with stuff because I don't want to think about school because I can't be spending all that energy all the time.

Beth concurred stating, "I think it's just finding a healthy balance. I always say that on my weekends I don't do anything but be a mom. They deserve that time with me and I bring them along as much as I can."

Michael went on to talk about the importance of leaders being able to shut work off in one's brain:

I shut them [emotional ups and downs] off . . . there's a great computer analogy where it's the male brain and the female brain . . . the female brain is like a computer program—like you're on the Internet and there are constant pop ups and there is no little x box in the corner of the female brain to block out those pop ups. I have that x capability and I got the pop up blocker and they [work thoughts] come in and I can shut them off and I keep them out completely. So you know if something is stressing me out, I just shut down, just completely shut down and go into my little world and . . . let it go, let it go.

The summer months and the more relaxed pace also helped some principals with self-management. Jane said,

June, July, and August are mine to do whatever I want to do. Even though I work I still get lots of time off and that's kind of my wind down time. Part of what I think makes me who I am is when I walk out the door, I walk out the door. I don't bring work home. I bring it home, but I usually don't do anything! You know I

live on a 110-acre farm. I have all kinds of animals so when I leave here that's my stress relief. That's what kind of balances me out a bit. Keeping myself physically and mentally balanced makes me a better person when I'm here. And that sometimes it's hard to do. Sometimes I have a tendency to put everyone else and everything else first. And usually I have someone who just says, "Maybe you just need to take a day off." The office can pick up on things like that. When things get a little edgy and you know things aren't working, they say "why don't you just leave a little early today" which is a gentle way of saying, "get out of here!"

This notion of balance was reinforced by Paul who shared, "really in our lives, how we prepare ourselves and train ourselves for being mentally and physically tough and yet being compassionate and understanding and loving and patient with people. You know, [it's] that balance."

Being aware of one's own triggers for stress was cited as being important and physical exercise seemed to be an important remedy for managing the stresses of leadership. One principal who was interviewed said,

I just needed to go and lift something. I needed to do something physical . . . walk outside and go swing on the swing at recess time. Just swing. The kids laugh, giggle, and I'm out and you get that rocking motion and I don't know if that helps or not but it's just shutting down and doing something completely different.

Beth stated, "I walk three miles everyday and I watch very carefully what I eat. I think I'm just very healthy and I think that helps you take care of yourself emotionally as well."

For other principals, visiting students and teachers in classrooms helped them manage themselves and keep their emotions in balance. For others, being intentional about organizing a personal schedule that is doable and maximizes available emotions and energy was another valuable practice. Julie shared,

> One way to do it is organize scheduling. I wouldn't schedule something that was going to be [difficult] like I needed to dismiss somebody or reprimand or because that would be really especially hard. You work with these people that long. It's a hard thing to do. It's a sad thing to do. They're going to be emotional and upset and I would just join them. But, if I needed to have lots of passion to solve something, I mean if there's something that I really truly believed in and I needed to help convey it to other people, I may schedule it during that time because I felt so strongly about it.

Within the domain of self-management, related to the competency of transparency, several practices were mentioned as being critical: being honest, being genuine, showing one's own emotions, being vulnerable, being humble, and demonstrating integrity. Having, and clearly communicating, high expectations, as well as modeling expected behavior, were additional leadership practices exemplifying the domain of emotional intelligence. Jane said it simply, "I try to practice what I preach. I have high expectations for the students and the staff. I tell it like it is." Steve concurred stating, "I don't ask them [staff] to do anything that I won't do myself."

Ann shared that an intentional strategy for self-management was to "surround myself with people who can add to what I bring to the table and what I don't." Jane said that when coworkers are under stress, being a leader who reassures is helpful. Having an

attitude of "we will be alright. We'll just kind of roll with the punches" helps others to manage themselves as well. Finally, trying to see the positive in circumstances, being passionate about one's work, and humor were additional practices exemplifying the domain of self-management gleaned from the interviews.

School leadership practices exemplifying social awareness.

Ten of the 11 principals interviewed mentioned empathy as a leadership practice exemplifying social awareness. Principals, who were not intuitively socially aware, took advantage of key individuals, like secretaries, who were very aware of what was going on in a school at any given time. When these key individuals helped leaders become socially aware, it helped those leaders develop empathy. Michael stated:

> If you just sit and listen to a secretary, any secretary, it's awesome in that they know everything that's going on in that building. They'll say, "Well, how did that surgery happen or turn out for you?" And I sometimes sit in the office and go "Surgery? What surgery? You had a surgery? How come I don't know about that? I should know about that surgery. Why don't I know about that surgery? I should know more about that stuff."

Dawn discussed the importance of "being aware of personal issues that are important to staff," of recognizing that "timing is everything," and of developing empathy by establishing "I-thou" relationships which really view others as sacred.

Julie cited showing compassion for what leaders are feeling and "getting to know the people you work with, what they're passionate about, what triggers them, who they get along with and who they don't." Ann makes an effort to ask staff members about their personal lives and mentioned praying for them as a practice demonstrating her social

awareness and sense of empathy. Another principal shared that giving people an opportunity to vent in a safe environment was demonstrative of empathy and contributed to social awareness. Being visible in the school and regularly visiting classrooms to interact with students and staff helped principals to be socially aware. Ann said, "My daily walk-throughs give me a sense for how teachers are doing." Jane talked about having an open door policy, being available to staff, and really listening to staff member concerns as evidence of this domain of emotional intelligence in practice.

One principal equated having empathy to being a cheerleader, "They're my faculty. I need to be their cheerleader." Another principal described this sense of empathy as "going to bat" for her staff. Judy talked about "being in the moment. You can't forget about the people because it's about the people. You can't have leadership without followership."

School leadership practices exemplifying relationship management.

Principals mentioned all of the competencies within the domain of relationship management as they shared what emotionally intelligent leadership looks like in their school practice. The competency of inspirational leadership was best exemplified by Beth, who stated,

> I always feel that I'd go out of my way to accommodate others and that's my job
> as a leader. I pave the way for them to do their job. I guess that's what I live by. I
> am here to take anyway obstacles for my teachers so that all they have to do is
> teach kids. I try to make their jobs as easy as possible so that they can do nothing
> but worry about teaching kids.

Paul remarked, "I don't know that I've been seen as a man of expertise, but more a person of inspiration."

Another competency that principals shared related practice about was influence. Principals attempted to exert influence by planting seeds with staff, modeling desired changes, choosing battles carefully, and practicing patience. As Judy pointed out,

You plant those seeds. That's what I try to do first and I ask, "Have you thought about this?" And I've tried to facilitate questions as opposed to "you need to stop doing this and do this." You're building that awareness with them. It's easier to say, "Do this and we're done. Get it off the list, move on." But you know, I'm not helping them grow and I've grown more patient with staff.

Michael stated,

I'd rather try to model or try to showcase or try to say "come on" and put it in their face enough that eventually they're going to see it. And, if they don't see it, well then maybe, I'll help them find an avenue to really get out of their job because maybe it's not for them.

This principal went on to say,

I'm going to pick my battles and I'm going to figure out who I think I can start to work on and I'm going to start to work on them. The others I have to let go because there are other issues going on. There's obviously other emotional feelings going on there that if I'd have brought up a conversation, we'd have gone the wrong way. And I don't need an enemy so we'll wait for an appropriate time.

Practicing situational leadership was linked to influence by Julie:

And you know there are some people on staff that you want to hit between the eyes. If something wasn't going well, they want you to come, they want you to flat out tell 'em, they want you to not mince words. And there's some people that you need to coax along. There's some people that are aware of themselves enough to know what the issue is. And there's some people where you have to help them look because they haven't ever . . . probing with them and pulling out of them.

Judy used a similar approach in leadership practice to exert influence: "It's knowing which staff member to motivate. Knowing which staff member to get out of his or her way. And, then knowing which staff member that, perhaps, needs more of a nudge." Lois had a similar outlook regarding practice to influence followers stating,

I started with those teachers again that were workable or the people who said they were very happy to have me come. I knew right away this is not going to be an easy group. Then it got down to the point when some, who were not sure about me, started being a little nicer to me. People would see me in the hall and they'd want to talk to me and they'd motion me into their room. They didn't talk to me in the hall because they didn't want to be seen by the negative ones. I think there were enough positive people that, after three years, the negativity kind of faded a little bit.

Leadership practices that stood out as examples of the competency of developing others included providing meaningful professional development, working to "build and maintain and sustain the greatness in others" as Paul avowed, by including staff in decision-making, and engaging them in self-reflection on their own practice as educators. Two principals mentioned empowerment and the gradual release of responsibility as a

way to develop others from a leadership position. Judy linked building self-awareness in others to goal setting and discussed the power therein explaining,

> What I really found helpful is to help teachers become more self aware within themselves of their strengths and weaknesses. And that comes with individual dialogue. It's more about goal setting and what you want to develop professionally, personally. And those have been outstanding in terms of building relationships and finding time in the day to sit down and just talk. I think that has been really powerful in terms of building trust, being a listener, and also having dialogue.

> Acting as a change catalyst is another competency within the domain of

relationship management. Three of the 11 principals shared insights about their practice related to leading change. Michael shared what he tells his staff:

> You have to realize that my ideas aren't always going to be the right ideas and you have to be willing to step up and say, "Hey, that's not going to work." Don't just take what I say as a directive.

Moments later, this same principal declared,

> I don't want compliance just for the sake of compliance. I want compliance because people buy into it and if they're not buying into it, then I have to try to convince them somehow. So I think that's what sets me up for people walking in to my office and saying, "this is never going to work!" As a teacher, go back to the classroom, if kids are afraid to answer a question because you're going to say "that's wrong," they are never going to answer a question. The same thing is true

as a principal. If I don't make it okay for them to walk in here and call me out on

something, they'll never do it.

Julie observed,

People get very anxious and territorial when there's going to be a curriculum

change and some really negative things start to happen in a district. And so when

we had a staff meeting I just said to the staff, "Look, you know I've seen some of

this go on. I need to tell you, that's not how we treat each other. That's not how

we behave. It's okay to support your subject, it's okay to promote your subject,

it's okay to talk to parents and kids about what you do and do real well in your

subject. It's not okay to go and say to the people in your department do not do

this, don't do that, don't do the other. So you can't shoot arrows at your buddy,

but you can pump up yourself. And then at the next staff meeting, I thanked them

for the efforts they were making in that area.

Another principal emphasized the power of challenging the status quo commenting, "No

longer do we do things just because that's the way we've always done them. We're going

to do things for what's right for children and how to educate children best."

With regards to the competency of conflict management, eight of the 11

principals mentioned this leadership practice. Looking for the win-win in situations,

taking a head-on approach to resolving conflict, respectfully confronting inappropriate

behaviors, using face-to-face methods of communication, acknowledging that conflict is

normal and can be healthy, being honest and making an effort to really listen to

understand multiple perspectives were all leadership practices named by principals who

were interviewed. Judy compared leading in a manner that manages conflict to coaching.

Nine of the 11 principals addressed the competency of building bonds within their narrative responses. Treating staff members as family was a practice noted by one principal. Intentionally celebrating successes and good news at staff meetings was a practice mentioned by five of these 11 principals. Helping to plan and participate in staff socials was viewed as a practice leading to building bonds and healthy relationships with staff. Doing nice things to demonstrate care for staff members as individual human beings was also mentioned as an important leadership practice within this competency. As Steve explained,

> It's all about building the relationship. You have to spend a lot of time getting to know your staff beyond what they do here everyday, [finding out] who their kids are and making an effort to go out and talk to the students. I do a lot of talking about their lives and what's going on with them.

Teamwork and collaboration is the final competency within the domain of relationship management. Five of the 11 principals interviewed spoke to practices related to building a sense of team and collaboration as a faculty. Principals shared that they intentionally built teams within the school where individuals within the team complemented each other's strengths. One principal found it helpful in her leadership practice to hold "lemon meetings" where once a month, staff could vent and complain, and the three remaining meetings each month were devoted to "sit down time to have dialogue about kids, about instruction, about parents, about the building, about programs." Allowing staff to participate in the decision-making process also fostered the development of teamwork and collaboration among staff.

The 11 interview participants were able to provide insights into their leadership by reflecting upon, and articulating, the intentional practices they employ that exemplify emotionally intelligent leadership. Table 23 provides a summary of examples of emotionally intelligent leadership practices mentioned by participants across the four domains of emotional intelligence.

Table 23

Exemplars of Practices Related to Four Domains of Emotional Intelligence

Emotional Intelligence Domain	Exemplars of Practices
Self-Awareness	Self-reflection Self-questioning Analyzing personal strengths and weaknesses
Self-Management	Being flexible Striving for self-improvement Aligning beliefs with practice Separating work life from home life Seeking balance Physical activity Intentional scheduling Taking care of self Laughter Focusing on the positive Being transparent Sharing emotions
Social Awareness	Reliance on the social awareness of others Being a good listener Being visible and interacting with others Having empathy Prayer Practicing presence
Relationship Management	Celebrations at staff meetings Social gatherings Being approachable Doing kind things Staff recognition Communicating openly and honestly Supporting others through change Working through conflict Having the courage to confront Empowering others Developing the talents and skills of others Being inclusive Sharing in decision-making Creating collaborative cultures Building and sustaining teams

Summary of Findings

Based on the preceding presentation and summary of data generated by the study, a summary of findings is as follows:

1. A direct, positive relationship exists between emotional intelligence and engagement in research-based school leadership practices as evidenced by the strong correlation (.73) calculated from the quantitative data collected and analyzed from 285 K-12 public school principals who participated in the electronic survey. The coefficient of determination was calculated to be .53 meaning that 53% of the variance in one variable (emotional intelligence) is accounted for by the other variable (engagement in research-based school leadership practices).

2. Of the 800 correlations calculated from the survey in a correlation matrix, 697 or 87.1% were positively correlated and significant at the .01 level, 45 or 5.6% were positively correlated and significant at the .05 level, and the remaining 58 or 7.2% showed no significant correlations. Given there were numerous correlations and the questions were highly related to each other, only the school leadership practices most highly correlated to each of the competencies within the four domains of emotional intelligence were reported. Of the 21 research-based school leadership practices examined in this study, nine were most highly correlated to emotional intelligence competencies: 1) contingent rewards, 2) resources, 3) visibility, 4) flexibility, 5) focus, 6) communication, 7) relationships, 8) optimize, and 9) situational awareness.

3. Seven primary themes were identified as influences on the formation of the emotionally intelligent school leaders interviewed in this study: 1) personal goal and experience, 2) role model, 3) family, 4) faith and spirituality, 5) adversity and hardship, 6) encouragement of others, and 7) the study of leadership. Additionally, numerous behaviors and strategies were shared by interviewees as examples of what their school leadership looks like in practice across the four domains of emotional intelligence as described in Table 20.

Chapter Five will discuss study findings and report conclusions related to the research purpose and reviewed literature, discuss recommendations for practice based on the findings and conclusions from the study, discuss limitations of the study, and provide recommendations for further research.

CHAPTER FIVE: DISCUSSION AND CONCLUSIONS

Review of Study

This study investigated the relationship between emotional intelligence and

research-based school leadership practices that impact student achievement. Chapter One

introduced the research through description of the background, purpose, approach,

significance, delimitations, assumptions, timeframe, and vocabulary of the study. Chapter

Two reviewed literature about theory and research related to the study in the areas of

emotional intelligence, effective school leadership, emotional intelligence as it relates to

leadership, emotional intelligence as it relates to organizational effectiveness, and

emotional intelligence as it relates to schools and effective school leadership. Chapter

Three detailed the design of the study through description of the research approach and

methodology, the research sample, research instrumentation through survey and

interview, data collection, study procedures, data analysis, and limitations. Chapter Four

presented and summarized data generated by the study design in alignment to the study

research questions. This final chapter will discuss study findings and conclusions related

to the research purpose and reviewed literature, discuss recommendations for leadership

practice based on findings and conclusions from the study, discuss limitations of the

study, and provide recommendations for further research.

Findings and Conclusions Related to Research Purpose

The purpose of this study was to examine if a relationship existed between

emotional intelligence (Goleman et al., 2002) and research-based school leadership

practices that impact student achievement (Marzano et al., 2005). There were three

research questions in this study:

1. Is there a relationship between emotional intelligence and research-based

   school leadership practices that have been identified to increase student

   achievement?

2. If so, what specific research-based school leadership practices have the

   strongest positive correlations to each of the emotional intelligence

   competencies?

3. What insights can school leaders, who demonstrate high levels of emotional

   intelligence and engagement in research-based school leadership, provide into

   their formation as leaders and their leadership practice?

Respective to each research question in the study, this chapter will include a summary of

the findings compared to related research, as well as conclusions based on findings and

relevant research. Additionally, this chapter will detail a proposed model based upon the

study findings and conclusions, describe recommendations for practice, articulate

suggestions for further research, and offer insights into the implications for leadership,

learning, and service.

Study Finding and Conclusions Compared to Related Literature about Question One

The first question in this study asked, "Is there a relationship between emotional

intelligence and research-based school leadership practices that increase student

achievement?" A simple random sample of 285 K-12 public school principals in the state

of Wisconsin participated in a self-report survey measuring their emotional intelligence

as well as their level of engagement in research-based school leadership practices that

impact student achievement (Marzano et al., 2005). Correlations were calculated between the total sum score from the survey questions measuring emotional intelligence and the total sum score from the survey questions measuring principals' engagement in research-based school leadership practices. The correlation between emotional intelligence and research-based school leadership practices was found to be .73. According to Salkind (2004), this is considered a strong correlation.

This finding confirms and extends previous research and theory reported in the reviewed literature from chapter two. First, recent studies suggest a positive link between emotional intelligence and general leadership performance outcomes (Higgs & Aitken, 2003; Scott-Ladd & Chan, 2004). Emotional intelligence in the leader makes a difference in how effectively that leader leads as evidenced by what the leader is able to accomplish. However, prior research speaks not only to the impact of emotional intelligence on the performance of an individual leader, the research also speaks to the impact of a leader's level of emotional intelligence on organizational performance (George, 2000). The literature reviewed in this study suggests that emotional intelligence, or lack thereof, makes a difference in general leadership performance outcomes—both at the individual and organizational levels.

Second, recent research suggests there is an important connection between emotional intelligence and organizational performance related specifically to school leadership and school performance outcomes. Cook (2006) found that emotional intelligence had a positive effect on principals' leadership performance concluding that emotional intelligence may assist principals as they strive to meet student needs. Using a survey and focus group discussions, Lyons (2005) found the competencies of emotional

intelligence were essential components for school principals to possess. Most importantly, in a qualitative study of high-performing, high-poverty middle schools in Virginia, Beavers (2005) found that principals in these high-performing schools, where student achievement was increased despite the often-inhibiting factor of poverty, demonstrated the competencies of emotional intelligence in their leadership.

The current study seems to confirm these findings within the literature and specifically linking emotional intelligence to research-based school leadership practices (Marzano et al., 2005). On the basis of the first finding in this study and the supporting literature, the researcher concludes there is a strong relationship between emotional intelligence and research-based school leadership. Therefore, it would seem reasonable to suggest that school leaders who are emotionally intelligent may also be likely to engage in research-based school leadership practices that make them effective leaders. Emotionally intelligent leadership matters, and it ultimately impacts student achievement. Though causation is not determined by this study, the shared variance represented by the strong correlation suggests those leaders who are emotionally intelligent are also likely to engage in research-based school leadership practices that impact student achievement.

Study Finding and Conclusions Compared to Related Literature about Question Two

The second question in this study asked, "If a relationship exists between emotional intelligence and research-based school leadership, what specific research-based school leadership practices have the strongest positive correlations to each of the emotional intelligence competencies?" Data collected from the electronic survey taken by 285 participants in the study were used to calculate question-to-question correlations between each of the 25 questions measuring emotional intelligence and each of the 32

questions measuring principals' engagement in research-based school leadership

practices. Of the 800 correlations calculated by this method, 697 or 87.1% were

positively correlated and significant at the .01 level, 45 or 5.6% were positively

correlated and significant at the .05 level, and 58 or 7.2% showed no significant

correlations.

Further analysis of the question-to-question correlations demonstrated that some

of the 21 school leadership practices identified by Marzano et al. (2005) were more

strongly correlated than others to the emotional intelligence competencies defined by

Goleman et al. (2002). Specifically, nine research-based school leadership practices were

most highly correlated to emotional intelligence competencies: 1) contingent rewards,

2) resources, 3) visibility, 4) flexibility, 5) focus, 6) communication, 7) relationships,

8) optimize, and 9) situational awareness. Contingent rewards was most highly correlated

to the competencies of accurate self-assessment ($r = .38$) and emotional self-awareness

($r = .35$). Resources was most highly related to self-confidence ($r = .35$), emotional self-

control ($r = .31$), and service ($r = .41$). Visibility was most highly correlated to

transparency ($r = .39$) and teamwork and collaboration ($r = .41$). Flexibility was most

highly related to adaptability ($r = .39$), optimism ($r = .41$), and empathy ($r = .33$). Focus

was most highly correlated to achievement ($r = .40$), inspirational leadership ($r = .46$),

influence ($r = .44$), and developing others ($r = .43$). Communication was most highly

related to initiative ($r = .39$). Relationships was most highly correlated to organizational

awareness ($r = .36$) and building bonds ($r = .42$). Optimize was most highly related to

change catalyst ($r = .48$). Situational awareness was most highly correlated to conflict

management ($r = .47$).

The strongest correlations occurred in the domain of relationship management, with all seven competencies within this domain showing correlations of .41 or higher. Within the emotional intelligence domain of relationship management, the leadership practice, optimize, had the highest correlation ($r = .48$). The research-based school leadership practice, focus, was most frequently highly related to emotional intelligence competencies, being the leadership practice most highly correlated to four of the 19 or 22% of the emotional intelligence competencies. Table 24 defines the research-based school leadership practices most highly correlated to emotional intelligence competencies.

Table 24

Definitions of School Leadership Practices Most Highly Correlated to Emotional Intelligence Competencies

School Leadership Practice	Defined as the Extent to Which the Principal…
Contingent Rewards	Recognizes and rewards individual accomplishments
Resources	Provides teachers with materials and professional development necessary for the successful execution of their jobs
Visibility	Has quality contacts and interactions with teachers and students
Flexibility	Adapts his or her leadership behavior to the needs of the current situation and is comfortable with dissent
Focus	Establishes clear goals and keeps those goals in the forefront of the school's attention
Communication	Establishes strong lines of communication with teachers and among students
Relationships	Demonstrates awareness of the personal aspects of teachers and staff
Optimize	Inspires and leads new and challenging innovations
Situational Awareness	Is aware of the details and the undercurrents in the running of the school and uses this information to address current and potential problems

Note. Adapted from Marzano et al. (2005).

These findings further support previous research. For example, the present study found that the school leadership practice of flexibility was most strongly correlated to three of the emotional intelligence competencies. In 2002, Dearborn discussed flexibility as an attribute of emotionally intelligent, resonant leaders, pointing out that these leaders "inspire, motivate, arouse commitment, and sustain it…[moving] fluidly between different leadership styles, flexing to meet the needs of the situation" (p. 525). In addition, the present study found the school leadership practices of focus, optimize, and situational awareness were most highly correlated to the emotional intelligence

competencies of achievement, inspirational leadership, influence, developing others, change catalyst, and conflict management. Scott-Ladd and Chan (2004) found that emotionally intelligent leaders understand their responses and change them, if necessary, as they read situations and people and use this knowledge to make better decisions and solve problems.

The multitude of significant correlations found in this study between the 19 competencies within the four domains of emotional intelligence (Goleman et al., 2002) and the 21 research-based school leadership practices (Marzano et al., 2005) provides further evidence of the strong relationship between the two constructs and, with the review of current literature related to this topic of study, serves as a source of triangulation of study results. The correlations in the findings were distributed across the four domains, which seems to suggest that all four domains of emotional intelligence are important to effective school leadership that impacts student achievement.

These findings and prior research lead the researcher to confirm the conclusion drawn from the findings relative to the first research question: there is a high degree of relatedness between emotional intelligence and research-based school leadership practices. Additionally, nine of the 21 research-based school leadership practices stand out as being most highly correlated in this study: 1) contingent rewards, 2) resources, 3) visibility, 4) flexibility, 5) focus, 6) communication, 7) relationships, 8) optimize, and 9) situational awareness. Therefore, where there is a presence of emotional intelligence in the school leader, it is reasonable to believe there is also likely a presence of engagement in leadership practices wherein the leader recognizes and celebrates accomplishments, provides necessary materials for teachers to do their jobs, interacts well with students and

staff, adapts his or her leadership behavior to specific situations, maintains a laser-like focus on school goals, communicates effectively with stakeholders, maintains healthy personal relationships with school staff, inspires and leads innovation, and is aware of what goes on within the school and uses that awareness to further educational mission and objectives.

Although significant correlations were found across all four domains of emotional intelligence, the strongest correlations in the findings were within the domain of relationship management, especially within the competencies of inspirational leadership, change catalyst, and conflict management. This causes the researcher to conclude it may be especially important for leaders who desire to impact student achievement to pay attention to developing and maintaining healthy, meaningful relationships between themselves and those they lead. Wheatley (1999) concurs stating,

> What gives power its charge, positive or negative, is the nature of the relationship. . . .The learning for all of us seems clear. If power is the capacity generated by our relationships, then we need to be attending to the *quality* of those relationships." (p. 40)

Study Finding and Conclusions Compared to Related Literature about Question Three

The third question in this study asked, "What insights can school leaders who demonstrate high levels of the identified emotional intelligence competencies and engagement in research-based school leadership provide into their formation as leaders and their leadership practice?" The first part of the third research question asked principals to provide insights into what influenced their formation as emotionally intelligent leaders. Data collected from follow-up, semi-structured interviews with 11

principals in the study indicated that seven primary factors throughout their lives

influenced their development as emotionally intelligent leaders: 1) personal goal and

experience, 2) role model, 3) family, 4) faith and spirituality, 5) adversity and hardship,

6) encouragement of others, and 7) the study of leadership.

Though their study was not specific to investigating the formation of emotionally

intelligent leaders, Stanford-Blair and Dickmann (2005) uncovered very similar

leadership development influences to those found in the current study. In their study of

36 exemplary leaders around the world, Stanford-Blair and Dickmann found that the

leaders they interviewed were shaped in their development by family and community,

cultural context, mentors, adversity, opportunity, and work experience. Both studies

found that positive and negative influences shaped leadership development.

From the study findings related to the first part of research question three, along

with supportive findings in the literature reviewed, the researcher concludes, as Stanford-

Blair and Dickmann (2005) do, that effective leaders are "formed, more than born"

(p. 13). Goleman et al. (2002) also confirm this conclusion in their research. They point

out that emotional intelligence competencies "are not innate talents, but learned abilities,

each of which has a unique contribution to making leaders more resonant and, therefore,

more effective" (p. 38).

It seems reasonable to conclude that emotionally intelligent leadership

development is formed. There are identifiable and replicable factors that shape leadership

formation. Emotionally intelligent leadership can be learned. Though nature plays a part,

nurture plays a major role in leadership formation. When asked what made them the

leaders they are, none of the principals interviewed responded by saying they were just

born that way. Each principal articulated specific and replicable influences in their leadership development.

It is important to note that the leadership influences mentioned by interview participants often began early in their lives. Taylor and Bagby (2002) confirm this finding that the development of emotional intelligence is likely influenced early in childhood as children interact with parents and caregivers. Approximately 64% of the 11 principals interviewed in the current study indicated that family members were influential in their development as emotionally intelligent leaders. Emotional intelligence matters, and it often begins early on in an individual's life.

The second part of the third research question asked principals to provide insights into what their emotionally intelligent leadership practice looked like in their school contexts. The follow-up interviews yielded numerous insights into what emotional intelligence looks like in daily school leadership practice. The findings extend beyond what was found in the current literature.

Principals in the present study articulated practices that exemplified emotionally intelligent leadership across the four domains. Related to the personal competencies of emotional intelligence, within the domain of self-awareness, principals identified leadership practices such as self-reflection, self-questioning, and analysis of personal strengths and weaknesses. Within the domain of self-management, principals identified leadership practices such as being flexible, striving for self-improvement, aligning beliefs with practice, separating work life from home life, seeking balance, engaging in physical activity, intentional scheduling, taking care of self, laughter, focusing on the positive, being transparent, and sharing emotions.

Related to the social competencies of emotional intelligence, within the domain of social awareness, principals identified leadership practices such as reliance on the social awareness of others, being a good listener, being visible and interacting with others, having empathy, prayer, and practicing presence. Within the domain of relationship management, principals identified leadership practices such as celebrations at staff meetings, social gatherings, being approachable, doing kind things, staff recognition, communicating openly and honestly, supporting others through change, working through conflict, having the courage to confront, empowering others, developing the talents and skills of others, being inclusive, sharing in decision-making, creating collaborative cultures, and building and sustaining teams.

The similarity between the leadership practices identified by the 11 principals and the 19 competencies of emotional intelligence (Goleman et al., 2002), and the 21 research-based school leadership practices (Marzano et al., 2005), reaffirms the prior conclusion regarding the relatedness between these two constructs and further supports triangulation. Furthermore, the researcher concludes that emotionally intelligent school leaders are intentional in embedding emotionally intelligent leadership practice in their work as school leaders. They are reflective, aware, and adjust their practice in ways that further organizational goals. Since the practices the principals in this study articulated are replicable, the researcher also concludes that emotionally intelligent school leaders can offer valuable advice to other school leaders wishing to develop their emotional intelligence and enhance their effectiveness as school leaders. This learning would be valuable in assisting principals to increase student achievement.

Summary of Study Findings, Literature, and Conclusions

Data from this study indicate there is a strong correlation between emotional intelligence and research-based school leadership practices. Nine of the 21 research-based leadership practices appear to be most highly correlated with the domains and competencies of emotional intelligence: 1) contingent rewards, 2) resources, 3) visibility, 4) flexibility, 5) focus, 6) communication, 7) relationships, 8) optimize, and 9) situational awareness. The strongest correlations are found within the domain of relationship management. When asked what influenced their formation as emotionally intelligent leaders, principals interviewed identified seven primary factors: 1) personal goal and experience, 2) role model, 3) family, 4) faith and spirituality, 5) adversity and hardship, 6) encouragement of others, and 7) the study of leadership. Additionally, these principals identified numerous intentional leadership practices across the four domains of emotional intelligence that position them to positively impact student achievement.

These findings both confirm and extend previous research cited in the literature. Emotional intelligence encompasses four domains and 19 competencies (Goleman, et al., 2002). Emotional intelligence contributes to leadership that is effective and impacts organizational performance. Cherniss (2000) indicates that emotional intelligence competencies are "critical for effective performance in most jobs" (p. 434). Goleman (1998) concurs stating that in leadership positions, nearly 90% of the skills necessary for success are social and emotional in nature. The reviewed literature also finds that 21 school leadership practices have been shown to increase student achievement (Marzano et al., 2005).

The present study provided the opportunity to explore the relationship between emotional intelligence and research-based school leadership practices. Findings from the study indicate a strong correlation between the two constructs studied and that certain research-based school leadership practices are more strongly correlated to emotional intelligence competencies than others. Goleman (2006) would support these findings as he comments:

> The essential task of a school leader comes down to helping people get into and stay in an optimal state in which they can work to the best of their ability. This typically means creating an atmosphere of warmth and trust—of global rapport— in which people feel good about themselves, energized about their mission, and committed to giving their finest. (p. 80)

Furthermore, school leaders who were interviewed in the study revealed a number of influences that shaped their leadership development confirming that emotionally intelligent leadership is developed. These same leaders demonstrated that part of being an effective school leader is being intentional about embedding emotionally intelligent leadership practice in the work of school leadership.

Based upon the significant shared variance between the two constructs studied, and the other findings described in this study and supported by literature, the researcher concludes that school leaders who are, or who learn to be, more emotionally intelligent may be more likely to engage in research-based school leadership practices that increase student achievement. As the level of emotional intelligence increases, the level of engagement in those research-based school leadership practices may also increase. School leaders who learn to develop proficiencies in the personal and social

competencies of emotional intelligence have been defined in the literature as great leaders who can significantly impact those they lead and serve. For school leaders, the impact is significant for parents, school staff, and most importantly, students. As Boyatzis and McKee (2005) state:

> Great leaders are awake, aware, and attuned to themselves, to others, and to the world around them. They commit to their beliefs, stand strong in their values, and live full, passionate lives. Great leaders are emotionally intelligent and they are *mindful:* they seek to live in full consciousness of self, others, nature, and society. Great leaders face the uncertainty of today's world with *hope:* they inspire through clarity of vision, optimism, and a profound belief in their—and their people's ability to turn dreams into reality. Great leaders face sacrifice, difficulties, and challenges, as well as opportunities, with empathy and *compassion* for the people they lead and those they serve. (p. 2)

The pressure to ensure that all students achieve at high levels is clearly evident and perceived by school principals (DuFour & Eaker, 1987; U.S. Department of Education, 2002; Stronge, 1993). It seems reasonable to conclude that emotional intelligence may be a valuable key to address both the pressure felt by principals and the goal of increasing student achievement. Principals who develop and practice the personal competencies of emotional intelligence (self-awareness and self-management), as well as the social competencies of emotional intelligence (social awareness and relationship management), may be better positioned to deal with the demands and complexities of school leadership in the twenty-first century.

In this time of uncertainty, in today's complex and challenging environment, and

with the stress inherent in leadership, leaders are constantly feeling threatened in

one way or another. Now, more than ever, [emotional intelligence] is key. It

enables us to monitor our own hot buttons, so we don't fly off the handle and

react without thinking. Developing self-awareness and self-management enables

us to capitalize on our strengths and manage our emotions so we can feel—and

create—passionate commitment to our goals. Understanding others enables us to

more effectively motivate individuals and guide groups, teams, and organizational

cultures. (Boyatzis & McKee, 2005, p. 30)

Clearly, the demands placed upon school leaders in the twenty-first century call for

leadership that is strong both intellectually and emotionally. Emotionally intelligent

leadership matters to those seeking to be effective school leaders.

Recommendations for Practice

Given the findings and conclusions related to literature from this study, several

recommendations for practice should be considered. Though causality was not

established, nor implied in this study, the proposed theory is that by acting upon the

recommendations for practice outlined in this section, public school districts may expect

that the school leaders they employ will be likely to engage in research-based school

leadership practices that impact student achievement. Since emotional intelligence is

positively correlated to engagement in research-based school leadership practices, it is

reasonable to conclude that increasing attention to emotional intelligence in leadership

may also increase principal engagement in the research-based leadership practices that

increase student achievement.

Five recommendations are proposed: 1) creating awareness of emotional intelligence and the impact on organizational performance, 2) paying attention to emotional intelligence within organizational hiring practices, 3) nurturing emotional intelligence through orientation and mentoring of school leaders, 4) expecting emotional intelligence competencies to be present in goal setting and evaluation processes utilized by districts, and 5) working to develop emotional intelligence in school leaders through ongoing, job-embedded professional development. The next section will detail these recommendations for either reinforcing or changing current practice within school districts with the goal of positively impacting organizational performance.

Awareness

Awareness is the first step in the change process, as knowing is considered a prerequisite to doing. Creating an awareness of the four domains and 19 competencies of emotional intelligence, the 21 research-based school leadership practices, and the link between emotional intelligence and research-based school leadership practices would be an important recommendation for school districts to consider when seeking to impact student achievement. Multiple methods of creating awareness should be utilized because learning styles among leaders differ just as learning styles among students differ. Book studies, workshops, presentations, and conversations between those who know about emotional intelligence, research-based school leadership practices, and the relationship between the two, would contribute to creating this necessary awareness.

Since the development of emotional intelligence often begins to develop at an early age, it is recommended that awareness of what emotional intelligence is, how it impacts individual and organizational effectiveness, and strategies to enhance emotional

intelligence begin in the elementary years and continue throughout post-secondary

education. With the study of leadership cited as an influence on the leadership

development of emotionally intelligent principals, pre-service teacher programs and

administrative leadership programs should include this topic of study in their required

courses.

Particularly for school leaders, who frequently work in stressful environments

where there are many opportunities during any given school day for unexpected and

sometimes volatile situations to occur with children, parents and staff, the variety and

intensity of emotions that can surface and be experienced are worth noting. Bradberry

and Greaves (2005) point out that,

> people experience an average of 27 emotions each waking hour. With nearly 17
>
> waking hours each day, you have about 456 emotional experiences from the time
>
> you get up until the time you go to bed. This means that more than 3,000
>
> emotional reactions guide you through each week and more than 150,000 each
>
> year! Of all the emotions you will experience in your lifetime, nearly two million
>
> of them will happen during waking hours. It's no wonder that people who manage
>
> emotions well are easier to work with and more likely to achieve what they set out
>
> to do. (pp. 120-121)

Certainly, it makes sense to build awareness and create an understanding of the critical

presence of emotional intelligence in the workplace and in life.

It also appears to make sense to develop an awareness of research-based school

leadership practices. We know more about what works related to effective school

leadership than ever before, due in large part to comprehensive studies like the meta-

analysis conducted by Marzano et al. (2005). Since school performance outcomes involve the success and future of students, there is no excuse for poor leadership practice, ignorance of best leadership practice, or lack of purposeful effort and progress toward institutionalizing best leadership practice. Understanding and enhancing emotional intelligence and simultaneously engaging in research-based school leadership practices may have a synergistic effect that will lead to increased student achievement.

Hiring Practices

When districts hire school leaders, they look for qualities related to traditional intellectual capacity in candidates: knowledge of instructional practice, effective discipline techniques, knowledge of school law, and sound fiscal management. These qualities are important. Emotional intelligence, however, may be even more important based upon the findings in this study and the related literature because the absence of emotional intelligence may inhibit the ability of the leader to be effective in instructional and financial leadership. Yet, emotional intelligence is frequently viewed as less important, if considered at all by school districts, as evidenced by the absence of attention to emotional intelligence in current hiring practices.

One could argue that hiring emotionally intelligent school leaders may be one of the most important things a school district can do to positively impact student achievement. Once hired, school principals usually remain employed without regard to their effectiveness as school leaders and their ability to increase student achievement. It seems critical that, from the very beginning, school districts hire the best leaders who have the greatest likelihood of tending to those leadership practices that really matter to student achievement. The best leaders appear to be emotionally intelligent leaders.

Therefore, it is recommended that hiring practices, protocols, and conditions be framed, developed, and used in a manner that captures an accurate portrayal of a candidate's level of emotional intelligence. This could be achieved through the use of reliable, validated measurement tools, and through answers to questions posed during the formal interview process that provide opportunities for candidates seeking school leadership positions to demonstrate and articulate examples of their emotionally intelligent leadership.

Additionally, hiring committees and boards of education should include observations, site visits, and interviews with those who worked with candidates for school leadership positions to further attain insight into their effectiveness at self-awareness, self-management, social awareness, and relationship management. Garnering 360-degree feedback will help to provide comprehensive information upon which selection committees can make the appropriate and best choices for principal hires. Purposefully paying attention to emotional intelligence within district hiring practices may result in employing school leaders who will engage in effective school leadership practices shown to increase student achievement.

Orientation and Mentoring

Once principals are hired, it is recommended that school districts continue to expect and support growth related to emotional intelligence, particularly those emotional intelligence competencies within the domain of relationship management, where the strongest correlations occurred. This can be achieved through the development and implementation of high quality orientation and mentoring programs. Findings in the current study spoke to the importance of role modeling, mentoring, and the

encouragement of others as influential on leadership development. The findings and supporting literature also indicate that emotional intelligence can be learned. Therefore, matching new principals with veteran principals, who themselves demonstrate emotional intelligence in leadership, could have a positive impact on the emotional intelligent leadership development of new hires.

Goal Setting and Evaluation

It has been said that you get what you ask for. This probably holds true for expected and achieved performance of school leaders as well. Therefore, another way districts can expect and support growth in the emotional intelligence of their school leaders is to develop and utilize administrative goal setting and evaluation procedures and tools that define, expect, and measure emotionally intelligent leadership. It is recommended that principals set annual goals that include the articulation of specific measurable growth targets with respect to developing the competencies that comprise emotional intelligence.

Principals should be expected to provide their supervisors tangible evidence of growth related to identified targets for enhanced performance. In turn, supervisors should include specific feedback related to identified targets and evidence of growth, provide any necessary support that encourages and provides for the development of emotional intelligence. The survey instrument designed for use in this study could be used by principals as a self-reflection tool and could be used by supervisors to provide principals with feedback on their development of emotionally intelligent school leadership.

When school districts are serious and intentional about expecting high levels of emotional intelligence in leadership and when they approach the development of

emotional intelligence in a job-embedded manner, it is suspected that districts will get what they ask for—improved organizational performance. Simply hiring for emotional intelligence is not enough. Districts must develop measures to ensure that proper attention is given to emotional intelligence as a critical component of effective leadership throughout the school leader's career.

Professional Development

Principals in this study noted that the study of leadership was influential in their development as leaders. Therefore, it is recommended that professional development opportunities be designed to assist principals in their growth as emotionally intelligent leaders. Opportunities for professional development should be intense, sustained, job-embedded, and differentiated to accommodate the diverse needs of principals within any school district. While it is important to build a common understanding of emotional intelligence and create a common language for what emotionally intelligent leadership looks like in practice, a one-size-fits-all approach to professional development is probably not be effective. Principals have differences in their own background knowledge and experiences related to emotional intelligence, and they are likely to have a variety of learning styles and preferences. School leaders will appreciate professional development that honors these differences in learning. In essence, leaders responsible for planning administrative professional development must practice emotional intelligence to be aware of and respond to the different needs of learning leaders.

In summary, it would seem logical that, given the strong correlation between emotional intelligence and research-based school leadership practices demonstrated in this study, as well as in the related literature, the recommendations made in this study be

thoughtfully considered and acted upon by school districts seeking to enhance student achievement. Creating an awareness of emotional intelligence among school leaders, being intentional about utilizing hiring practices and protocols that consider emotional intelligence in prospective candidates, nurturing emotional intelligence through orientation and mentoring, expecting growth in the development of emotional intelligence through goal setting and evaluation, and providing professional development opportunities that strengthen emotionally intelligent leadership practice would seem to be beneficial in ensuring that effective leadership practice happens in the school setting. As Fullan (2001) observes, "effective leaders work on their own and others' emotional development. There is no greater skill needed for sustainable improvement" (p. 74).

<center>Proposed Model Based on Study Findings and Conclusions</center>

The literature reviewed, the findings and conclusions from this study, and the recommendations for practice proposed suggest a possible model for understanding the relationship between emotional intelligence and research-based school leadership practices. The model presented in Figure 2 depicts the strong correlation between emotional intelligence and effective school leadership that increases student achievement. The model also articulates recommendations for district actions that may enhance emotionally intelligent school leadership.
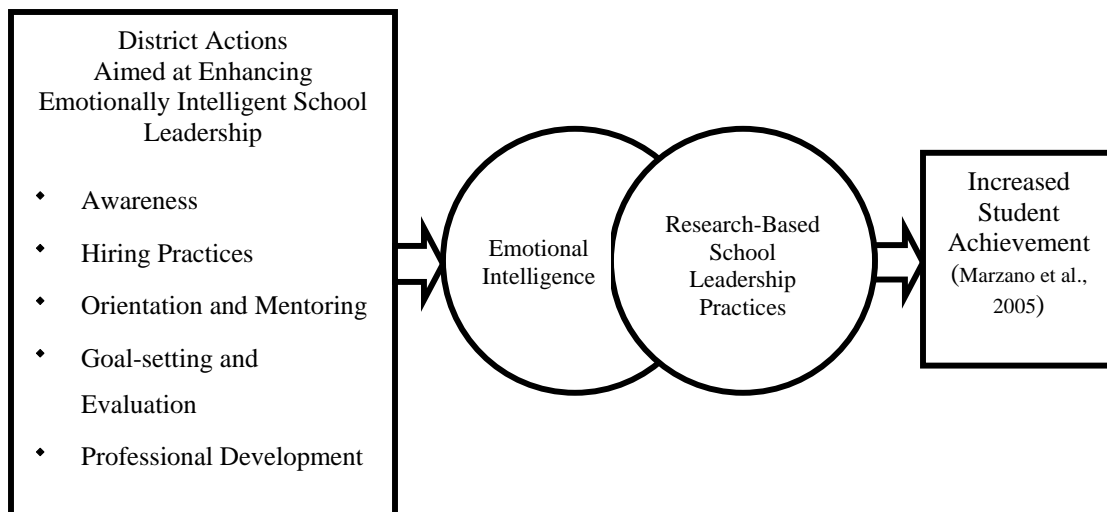
Figure 2. Proposed model based on study findings and conclusions.

The Venn diagram in the center of the figure represents the strong relationship between emotional intelligence and research-based school leadership practices found in this study. The overlapping circles represent the strong degree of shared variance ($r = .73$) between these two constructs. The arrow from the Venn diagram extending toward the right of the figure serves as a reminder that the 21 school leadership practices identified in the meta-analysis research by Marzano et al. (2005) are linked to increases in student achievement. The box to the left in the model represents the recommendations for practice described previously in this chapter.

Based upon the related literature, findings, and conclusions in this study, the researcher proposes that school districts that take the described actions to enhance emotional intelligence in school leaders may be better positioned to make a greater positive impact on student achievement. The recommended actions include creating awareness around emotional intelligence and its relationship to organizational performance, principal effectiveness and increased student learning, utilizing hiring

practices that lead to the employment of emotionally intelligent school leaders, providing orientation and mentoring related to emotional intelligence, expecting emotional intelligent leadership and development of such leadership in performance evaluations as well as goal-setting processes, and providing on-going, high quality, job-embedded professional development related to emotional intelligence.

This study found a strong, positive correlation exists between emotional intelligence and research-based school leadership practices that have been identified to increase student achievement. Districts and school leaders currently apply effort to strengthen engagement of the 21 research-based school leadership practices. In contrast, districts and school leaders do little to purposefully strengthen emotional intelligence. By following the recommendations in this study related to enhancing emotional intelligence, districts and school leaders can add another level of intentionality to their leadership practice.

Limitations of the Study

This study involved K-12 public school principals in the state of Wisconsin. Two hundred eighty five principals participated in the electronic survey measuring emotional intelligence and engagement in research-based school leadership practices. The survey was a self-report measure, which posed a possible limitation because it involved principals' self-perceptions of their practice, which may or may not reflect the reality of their practice. The researcher attempted to alleviate this limitation by keeping the survey results anonymous and not offering remuneration for participation in the survey. Additionally, it was assumed that principals would respond honestly to the questions posed in the survey and that their self-perceptions would be equally accurate on both

parts of the survey from which the correlations were calculated—the part measuring emotional intelligence and the part measuring engagement in research-based school leadership practices. The researcher informed participants that the survey measured general leadership practices, however, the researcher did not specify that part of the survey measured emotional intelligence in leadership. It was assumed that disclosing to participants that a form of intelligence was being measured might cause undue inflation of self-perceptions.

The survey portion of the study involved a simple random sample of the population studied. The response rate calculated from the ratio of all surveys returned to all surveys sent was 39%. The response rate calculated from the ratio of all surveys returned to all surveys sent minus the undeliverable surveys was 45% (surveys returned divided by the actual number of surveys received). The researcher inflated the number of surveys sent to ensure an adequate sampling. The response rate achieved was sufficient to utilize inferential statistics making the results generalizable to the population of K-12 public school principals in the state of Wisconsin. While other states may have similar demographics and the results from this study may be generalizable to K-12 public school principals in those states, that was outside the scope of this study and, therefore, undetermined.

It was not practical to conduct follow-up interviews with all 285 principals who participated in the survey, therefore, only 11 principals were selected in a purposive sampling presenting another possible limitation of the study. To avoid bias in selection, the researcher selected the top 11 principals who scored highest both in emotional intelligence and in engagement in research-based school leadership practices. Since the

purpose of the follow-up interviews was to provide further insights into the findings related to the primary research question, the impact of this possible limitation is negligible.

Internal validity was addressed through field tests of the original survey and interview protocol as well as statistical analyses of survey data, specifically Cronbach's Alpha calculations. External validity of the study was addressed through sample size and random sample selection ensuring generalizability of results. Triangulation of data results, expert panel review of survey and interview questions during development, feedback from participants in field tests of survey and interview questions, factor analysis, member checks in the form of transcript review, rich descriptive data collected from the interviews, and comparison to current literature reviewed were utilized to further strengthen validity of the study.

<center>Suggestions for Further Research</center>

This study sought to determine if a relationship exists between emotional intelligence and research-based school leadership practices, to determine which school leadership practices were most highly correlated to emotional intelligence, and to provide insights into the formation and practice of emotionally intelligent leadership. Other studies would be interesting to investigate in order to replicate, extend, and refine study findings. First, it would be interesting to further investigate the extent to which organizational context and culture affects the development of emotionally intelligent leadership as well as engagement in research-based school leadership practices. Second, it would be interesting to investigate the impact emotionally intelligent leadership, or lack

thereof, at the very top of the educational organization (i.e. superintendents and other central office administration) has on the success and culture of the entire school district.

A third possible area for further research would include the investigation of the impact of emotionally intelligent leadership on stable, healthy school cultures as compared with the impact of emotionally intelligent leadership on unstable, dysfunctional school cultures. Fourth, it would be interesting to research the leadership of high performing school districts to determine what role emotional intelligence has at all levels of the organization from superintendents, to central office administration, to principals, to teacher leaders. Fifth, it would be worthy to study school districts applying any combination of the recommendations discussed in this study related to building awareness, hiring practices, orientation and mentoring, goal-setting and evaluation, and professional development to determine the impact of these recommended practices.

Sixth, it would be of value for the present study to be replicated with specific demographic subgroups within the sample, for example, surveying and interviewing only high school principals or only elementary principals. Would the findings be similar or different? Would there be a difference in the findings if the study only included principals with more than 20 years of experience or if the study only included principals from large, urban school districts? These would be interesting studies and would contribute to the developing knowledge base of emotional intelligence and effective school leadership. It might be interesting to interview additional principals, who demonstrate high levels of emotional intelligence, to determine if the findings related to leadership formation and practice would be similar or different. Perhaps less emotionally intelligent leaders should be interviewed to determine what influenced their development as leaders. Finally, it

would be beneficial to study the interdependence of other variables besides emotional intelligence that impact the success of leaders. Emotionally intelligent leadership is not the only variable linked to school leadership practices that impact student achievement. What additional variables could be identified and examined to further inform practice?

Final Remarks Regarding the Implications for Leadership, Learning, and Service

This study was designed to further inform the field of study related to leadership, specifically emotionally intelligent leadership that impacts student achievement. Implications regarding the nature and practice of leadership, learning, and service have been articulated throughout the review of literature, the data reported from the surveys and interviews, the findings from the study, and the recommendations for practice. Based upon the results reported and discussed here, the researcher concludes that leading with heart and head by tending to emotional intelligence as well as traditional intelligence is an effective means to achieving school leadership that positively impacts student learning.

The present study advances understanding of the nature and practice of impactful leadership. The findings and recommendations presented are beneficial for all stakeholders in the educational community, from parents and community members seeking to understand effective school leadership to superintendents and boards in positions to hire school leaders. School leaders will find the results of this study useful in their own understanding of and aspirations to become more effective leaders. Emotionally intelligent school leaders can help to create resonance within their schoolyards, hallways, classrooms, and faculty lounges. They can also create the conditions necessary for teachers, and most importantly, for students to learn to thrive,

achieve, and succeed. Emotionally intelligent leadership may be one of the greatest gifts

of service school leaders can offer to those they lead.

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Appendix A

School Leadership Survey

For each item **circle** the number on the continuum that most accurately describes the extent to which you engage in the behaviors indicated.

In your role as a school leader, to what degree…

1. … do you recognize and celebrate the accomplishments of your school's students and staff (for example, announcing the names of students with perfect attendance at an all-school assembly, praising members of the science department at a faculty meeting for a recent article they published in a professional journal, etc.)?

Never   Always
1   2   3   4   5   6   7   8   9   10

In your role as a school leader, to what degree…

2. …do you admit your school's shortcomings including inferior performance by students/staff (for example, sharing an issue with truancy with the board, etc.)?

Never   Always
1   2   3   4   5   6   7   8   9   10

In your role as a school leader, to what degree…

3. …are you willing to lead change initiatives with uncertain outcomes (for example, piloting a new math program, etc.)?

Never   Always
1   2   3   4   5   6   7   8   9   10

In your role as a school leader, to what degree…

4. …do you encourage and empower staff to take risks (for example, trying a new daily schedule, integrating a new technology into instruction, etc.)?

Never   Always
1   2   3   4   5   6   7   8   9   10

In your role as a school leader, to what degree…

5.   …do you recognize individuals for their performance results (for example, praising a teacher for extra effort put in to utilizing a new instructional strategy that has improved reading achievement of his special education students, etc.)?

Never   Always

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

In your role as a school leader, to what degree…

6.   …do you facilitate effective means of communication with and between staff (for example, establishing bi-weekly meetings to discuss staff concerns, sending regular emails to keep staff informed of district progress on initiatives, etc.)?

Never   Always

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

In your role as a school leader, to what degree…

7.   …do you facilitate effective means of communication with and among students (for example, attending student council meetings, visiting with students in the lunchroom, etc.)?

Never   Always

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

In your role as a school leader, to what degree…

8.   … do you promote cohesion, purpose, and well-being among staff (for example, facilitating a back-to-school retreat to revisit school mission, data, and improvement plans, etc.)?

Never   Always

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

In your role as a school leader, to what degree…

9.   …do you develop a shared vision of what your school could be like (for example, brainstorming with staff what your school will look like in five years, etc.)?

Never   Always

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

In your role as a school leader, to what degree…

10.   …do you protect instructional time from interruption (for example, not paging staff over the public address system while instruction is in progress, etc.)?

Never   Always

1	2	3	4	5	6	7	8	9	10

In your role as a school leader, to what degree…

11.   …do you adapt your leadership style to effectively meet the needs of specific situations (for example, intervening with science department when a decision they want to make will have a negative impact on another department, not giving your opinion during an early faculty discussion on report card development so the staff can have ownership of the process, etc.)?

Never   Always

1	2	3	4	5	6	7	8	9	10

In your role as a school leader, to what degree…

12.   …do you encourage people to express diverse opinions (for example, inviting feedback from staff that tends to be negative about change, etc.)?

Never   Always

1	2	3	4	5	6	7	8	9	10

In your role as a school leader, to what degree…

13.   …do you establish clear, achievable goals for curriculum, instruction and assessment practices within your school (for example, setting a building goal for number of minutes per week devoted to writing instruction, etc.)?

Never   Always

1	2	3	4	5	6	7	8	9	10

In your role as a school leader, to what degree…

14.   …do you hold high expectations that all students can learn at high levels (for example, setting measurable improvement goals for students with disabilities and from economically disadvantaged backgrounds, etc.)

Never   Always

1	2	3	4	5	6	7	8	9	10

In your role as a school leader, to what degree…

15. …do you keep continued, focused attention on learning and performance goals (for example, regularly revisit end-of-year school achievement goals at monthly faculty meetings, etc.)?

Never   Always

1	2	3	4	5	6	7	8	9	10

In your role as a school leader, to what degree…

16. …do you possess and share with staff well-defined beliefs about schools, teaching, and learning (for example, sharing a written memo with staff at the beginning of the year that clearly states your belief that students from economically disadvantaged situations must receive additional attention from staff to be successful in their learning, etc.)?

Never   Always

1	2	3	4	5	6	7	8	9	10

In your role as a school leader, to what degree…

17. …do you demonstrate behaviors and practices that are consistent with your beliefs (for example, devoting faculty meeting time to a book study on student intervention because you believe professional development is key to effective teaching, etc.)?

Never   Always

1	2	3	4	5	6	7	8	9	10

In your role as a school leader, to what degree…

18. …do you provide opportunities for your staff to be involved in decision making and the development of school policies (for example, scheduling opportunities for teachers to work with you on developing a school homework policy, etc.)?

Never   Always

1	2	3	4	5	6	7	8	9	10

In your role as a school leader, to what degree…

19. …do you keep yourself well-informed about current research and theory on effective schooling (for example, reading professional journals, attending leadership conferences, etc.)?

Never   Always

1	2	3	4	5	6	7	8	9	10

In your role as a school leader, to what degree…

20. …do you foster systematic discussion about cutting-edge research and theory on effective schooling (for example, leading a book study on the impact of poverty on learning, etc.)?

Never									Always
1	2	3	4	5	6	7	8	9	10

In your role as a school leader, to what degree…

21. …are you directly involved in helping teachers design curriculum, instruction, and assessment (for example, participating in work sessions to develop grade/course level benchmarks in math, etc.)?

Never									Always
1	2	3	4	5	6	7	8	9	10

In your role as a school leader, to what degree…

22. …do you monitor the impact of your school's curricular, instructional, and assessment practices on student achievement (for example, graphing and posting in the lounge the results of quarterly literacy assessments used in your school, etc.)?

Never									Always
1	2	3	4	5	6	7	8	9	10

In your role as a school leader, to what degree…

23. …do you portray a positive attitude about the ability of staff to accomplish substantial things (for example, stating to staff that you recognize the implementation issues involved in implementing a new science curriculum and that you will provide the support necessary to make the change, etc.)?

Never									Always
1	2	3	4	5	6	7	8	9	10

In your role as a school leader, to what degree…

24. …do you ensure that your school complies with all school, district, and state policies and procedures (for example, annually reviewing board policies to make sure the school is abiding by them, etc.)?

Never									Always
1	2	3	4	5	6	7	8	9	10

In your role as a school leader, to what degree…

25. …are you an advocate for your school with parents, community, and central office (for example, writing an article for the local newspaper about your school's after-school tutoring/enrichment program, etc.)?

Never   Always

1   2   3   4   5   6   7   8   9   10

In your role as a school leader, to what degree…

26. …do you maintain personal relationships with teachers and acknowledge the significant personal issues in their lives (for example, hosting a back-to-school party for staff members and their families, visiting a sick staff member in the hospital, etc.)?

Never   Always

1   2   3   4   5   6   7   8   9   10

In your role as a school leader, to what degree…

27. …do you ensure that teachers have the materials and equipment necessary for instruction (for example, reallocating budgeted funds to provide additional science lab equipment needed for and AP biology class, etc.)?

Never   Always

1   2   3   4   5   6   7   8   9   10

In your role as a school leader, to what degree…

28. …do you ensure that teachers have the necessary staff development opportunities to enhance their teaching effectiveness (for example, budgeting for release time for reading teachers to attend state literacy conference, etc.)?

Never   Always

1   2   3   4   5   6   7   8   9   10

In your role as a school leader, to what degree…

29. …are you aware of informal groups and relationships among the staff (for example, meeting with a group of teachers you heard are upset with a recent decision you made, etc.)?

Never   Always

1   2   3   4   5   6   7   8   9   10

In your role as a school leader, to what degree…

30. …do you make systematic and frequent visits to classrooms (for example, making daily visits to classrooms to ask students and teachers what they're learning, etc.)?

Never   Always

1	2	3	4	5	6	7	8	9	10

In your role as a school leader, to what degree…

31. …do you strive to build relationships with students (for example, attending extra-curricular events and interacting with students there, etc.)?

Never   Always

1	2	3	4	5	6	7	8	9	10

In your role as a school leader, to what degree…

32. … are you highly visible to students, teachers, and parents (for example, roaming the halls during parent teacher conferences, etc.)?

Never   Always

1	2	3	4	5	6	7	8	9	10

As an individual, to what degree…

33. … do you acknowledge your own strengths and limitations?

Never   Always

1	2	3	4	5	6	7	8	9	10

As an individual, to what degree…

34. … do you recognize your own emotions?

Never   Always

1	2	3	4	5	6	7	8	9	10

As an individual, to what degree…

35. … do you realize the impact of your emotions on what is happening around you?

Never   Always

1	2	3	4	5	6	7	8	9	10

As an individual, to what degree…

36. … are you able to describe your emotions?

Never   Always
1   2   3   4   5   6   7   8   9   10

As an individual, to what degree…

37. … are you confident in your abilities and self-worth?

Never   Always
1   2   3   4   5   6   7   8   9   10

As an individual, to what degree…

38. … do you remain composed in stressful situations?

Never   Always
1   2   3   4   5   6   7   8   9   10

As an individual, to what degree…

39. … are you trustworthy?

Never   Always
1   2   3   4   5   6   7   8   9   10

As an individual, to what degree…

40. … are you able to adapt to uncertainty and changing conditions?

Never   Always
1   2   3   4   5   6   7   8   9   10

As an individual, to what degree…

41. … are you flexible to overcome obstacles?

Never   Always
1   2   3   4   5   6   7   8   9   10

As an individual, to what degree…

42.   … do you work to improve your performance?

Never									Always
1	2	3	4	5	6	7	8	9	10

As an individual, to what degree…

43.   … do you act in ways to do things better?

Never									Always
1	2	3	4	5	6	7	8	9	10

As an individual, to what degree…

44.   … do you look for the positive side of difficult people, events, and situations?

Never									Always
1	2	3	4	5	6	7	8	9	10

As an individual, to what degree…

45.   … do you view unexpected situations as opportunities rather than threats?

Never									Always
1	2	3	4	5	6	7	8	9	10

As an individual, to what degree…

46.   … do you listen attentively to understand the feelings and perspectives of others even when they are different from your own?

Never									Always
1	2	3	4	5	6	7	8	9	10

As an individual, to what degree…

47.   … do you understand the informal structures, social networks, and politics at work within your organization?

Never									Always
1	2	3	4	5	6	7	8	9	10

As an individual, to what degree…

48.   … do you strive to recognize and meet the needs of all stakeholders (students, staff, parents, community, board of education, etc.)?

Never   Always
1   2   3   4   5   6   7   8   9   10

As an individual, to what degree…

49.   … do you accurately read the mood of others within the organization?

Never   Always
1   2   3   4   5   6   7   8   9   10

As an individual, to what degree…

50.   … do you work to set a positive emotional tone in your organization?

Never   Always
1   2   3   4   5   6   7   8   9   10

As an individual, to what degree…

51.   … do you inspire others to work toward a compelling vision?

Never   Always
1   2   3   4   5   6   7   8   9   10

As an individual, to what degree…

52.   … are you able to influence and persuade others by engaging them in dialogue?

Never   Always
1   2   3   4   5   6   7   8   9   10

As an individual, to what degree…

53.   … do you invest effort in developing other people's abilities?

Never   Always
1   2   3   4   5   6   7   8   9   10

As an individual, to what degree…

54.   … do you initiate and lead productive change?

Never									Always
1	2	3	4	5	6	7	8	9	10

As an individual, to what degree…

55.   … do you work to resolve conflict by facilitating open communication regarding the disagreement?

Never									Always
1	2	3	4	5	6	7	8	9	10

As an individual, to what degree…

56.   … do you strive to build and maintain positive relationships?

Never									Always
1	2	3	4	5	6	7	8	9	10

As an individual, to what degree…

57.   … do you model respect, cooperation, and team building?

Never									Always
1	2	3	4	5	6	7	8	9	10

For items 58-61, please check the responses that best describe you/your leadership situation.

58.   **Gender**

   ___   Male

   ___   Female

59. **Level of your administrative assignment** (check all that apply)

___ Elementary

___ Middle School

___ High School

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60. **Total number of years served as a principal**

___ 1-5

___ 6-10

___ 11-15

___ 16-20

___ more than 20

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61. **Student population of the DISTRICT in which you serve**

___ Small/rural (less than 1,500 students)

___ Mid-sized (1,500-10,000 students)

___ Large/urban (more than 10,000 students)

THANK YOU FOR MAKING TIME TO COMPLETE THIS SURVEY! YOUR

RESPONSES WILL BE KEPT CONFIDENTIAL.

Appendix B

Introductory and Follow-up Correspondence to Survey Sample

Introductory Email to Survey Sample

Dear Colleague,

In the course of your hectic days (and nights!) as a building principal, have you ever wondered what leadership behaviors lead to student achievement? In my doctoral research at Cardinal Stritch University, I am studying effective school leadership practices—what school leaders do to impact student learning. I NEED YOUR HELP! Please go to the link in this email and complete the brief survey on school leadership behaviors. The survey should only take you 15-20 minutes to complete. It will be easy, I promise!

By completing the survey, you are giving your consent to participate in this important study. I can assure you that your responses to the survey will be completely confidential and you will remain completely anonymous. I would be very glad to share the results of my research with you, and you can request that by sending me a quick email at kheldt@wausau.k12.wi.us. I anticipate that I will complete my research and have results ready to share by December, 2008.

Please don't file this in your trash folder! I really need principals like YOU to further the research to make a difference to students and their learning. I hope you'll choose to take advantage of this opportunity to be a part of this cutting edge research! THANK YOU, IN ADVANCE, FOR YOUR PARTICIPATION!

Sincerely,

Karen Wendorf-Heldt
Director of Education
Wausau School District

Here is a link to the survey:
http://www.surveymonkey.com/s.aspx?sm=xQANXMO0EtP8MCfYoNGyp0NIQqjQGJy eDYFxZWSUGX0_3d

This link is uniquely tied to this survey and your email address. Please do not forward this message.

Please note: If you do not wish to receive further emails from us, please click the link below, and you will be automatically removed from our mailing list. http://www.surveymonkey.com/optout.aspx

First Reminder

Good morning, Principals,
   This is just a reminder to ask you to please consider taking a few minutes to complete the survey on school leadership. By completing the survey, not only will you be helping me with this research, but you will also have the opportunity to reflect on your own practice as an educational leader. I am one third of the way to my goal of getting 350 returned surveys and need your help to close the gap. Thank you so much! Have a great week!
   If you would like a refresher on what this research is all about, I've pasted the text of the first email below for your reference.
Thanks again!

Second Reminder

Good Morning, Principals,
   I am happy to report that I am 2/3 of the way to reaching my research sample goal of 350! However, I still need **127** more principals to take the survey.
I would be very THANKFUL if YOU would be one of those 127 principals. I need your help! Please take a moment to complete the brief survey.
Happy Thanksgiving!

Third Reminder

Good morning, Principals!
   'Tis the holiday season—filled with shopping, caroling, baking cookies, decorating the tree, wrapping presents, celebrating the season with loved ones, and, for those of us trying to earn a doctorate degree, trying desperately to complete our dissertation research. All I want for Christmas this year is to finish collecting the data for this research on school leadership! Won't you PLEASE help me fill my Christmas stocking by taking a few minutes to complete the brief survey I've sent you (see link below)? It really won't take much of your valuable time and I REALLY NEED YOUR HELP! (Yes, I have arrived at the desperation stage in my research!).
   By completing the survey, you'll be giving yourself a gift by taking time to reflect on your own leadership practice. You will also be giving me a most wonderful gift by helping me add to the knowledge base about effective school leadership. My gifts to you are the offer to share the results of my research with you should you desire that and I'll quit sending these annoying email reminders that clutter up your inbox!
THANK YOU for your generosity in contributing to this research! Truly, may you have   a blessed holiday season and a healthy, prosperous New Year!
Merry Christmas!

Fourth Reminder

Ho! Ho! Ho!

I need just 50 more completed principal surveys by this Friday, December 21st or else my beautiful carriage turns back into a pumpkin, my six white horses become mice again, and the ball is over for this Research Cinderella. I will have to return to "my own little corner in my own little room" and face the wrath of my wicked stepmother who will wonder why I was unable to collect the data I needed for my doctoral research. PLEASE help!
Thanks so very much!
Merry Christmas and Happy Holidays

☺Karen (aka Cinderella)

Appendix C

Table of Specifications Matrix for School Leadership Survey

School Leadership Responsibility	Survey Part and Item Number
Affirmation	Part One: Items 1, 2
Change Agent	Part One: Items 3, 4
Contingent Rewards	Part One: Item 5
Communication	Part One: Items 6, 7
Culture	Part One: Items 8, 9
Discipline	Part One: Item 10
Flexibility	Part One: Items 11, 12
Focus	Part One: Items 13, 14, 15
Ideals and Beliefs	Part One: Items 16, 17
Input	Part One: Item 18
Intellectual Stimulation	Part One: Items 19, 20
Involvement in Curriculum, Instruction, and Assessment	Part One: Item 21
Knowledge of Curriculum, Instruction, and Assessment	Part One: Item 19
Monitoring and Evaluating	Part One: Item 22
Optimizer	Part One: Item 23
Order	Part One: Item 24
Outreach	Part One: Item 25
Relationships	Part One: Item 26
Resources	Part One: Items 27, 28
Situational Awareness	Part One: Item 29
Visibility	Part One: Items 30, 31, 32
Emotional Intelligence Domain-Competency	**Survey Part and Item Number**
Self-Awareness	Part Two: Items 33, 34, 35, 36, 37
• *Emotional Self-Awareness*	• *Part Two: Items 34, 36*
• *Accurate Self-Assessment*	• *Part Two: Items 33, 35*
• *Self-Confidence*	• *Part Two: Item 37*
Self-Management	Part Two: Items 38, 39, 40, 41, 42, 43, 44, 45
• *Emotional Self-Control*	• *Part Two: Item 38*
• *Transparency*	• *Part Two: Item 39*
• *Adaptability*	• *Part Two: Items 40, 41*
• *Achievement*	• *Part Two: Item 42*
• *Initiative*	• *Part Two: Item 43*
• *Optimism*	• *Part Two: Items 44, 45*
Social Awareness	Part Two: Items 46, 47, 48, 49
• *Empathy*	• *Part Two: Item 46*
• *Organizational Awareness*	• *Part Two: Items 47, 49*
• *Service*	• *Part Two: Item 48*
Relationship Management	Part Two: Items 50, 51, 52, 53, 54, 55, 56, 57
• *Inspirational Leadership*	• *Part Two: Items 50, 51*
• *Influence*	• *Part Two: Item 52*
• *Developing Others*	• *Part Two: Item 53*
• *Change Catalyst*	• *Part Two: Item 54*
• *Conflict Management*	• *Part Two: Item 55*
• *Building Bonds*	• *Part Two: Item 56*
• *Teamwork and Collaboration*	• *Part Two: Item 57*