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Michele Reynolds
Eastern Kentucky University

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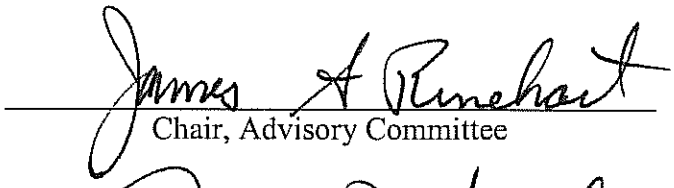
AN INVESTIGATION OF THE EMOTIONAL INTELLIGENCE COMPETENCIES OF NATIONAL MIDDLE SCHOOLS TO WATCH PRINCIPALS

By

Michele Gillians Reynolds

Dissertation Approved:



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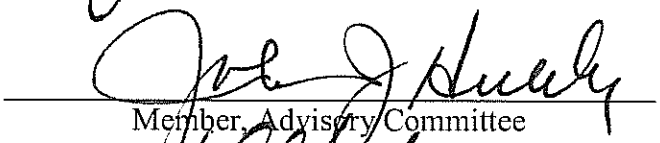

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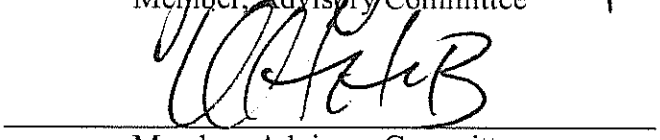

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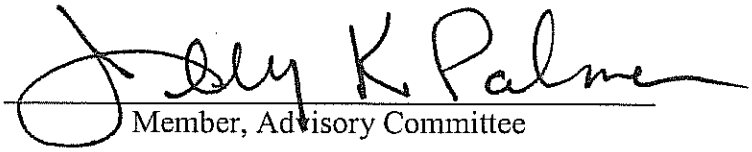

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AN INVESTIGATION OF THE EMOTIONAL INTELLIGENCE COMPETENCIES OF NATIONAL MIDDLE SCHOOLS TO WATCH PRINCIPALS

By

Michele Gillians Reynolds

Masters of Education
Eastern Kentucky University
2000

Bachelor of Arts
University of Kentucky
1995

Submitted to the Faculty of the Graduate School of
Eastern Kentucky University
in partial fulfillment of the requirements
for the degree of
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DEDICATION

This dissertation is dedicated to those who devote their lives to the education of our nation's middle school children.

ACKNOWLEDGEMENTS

Love and thanks to my husband, James, who sacrificed much to allow me to chase this dream. Your patient attentiveness and quiet support during this process meant more to me than you know. Your grocery-shopping, clothes-washing, house-cleaning, and (surprisingly delicious) dinner-cooking did not go unnoticed or unappreciated. I promise I will pick up the slack now!

Much love to my mom and dad, who have always made me believe I could do anything I dreamed. When you sent me off to college 21 years ago, I bet you never thought that it would take me until 2011 to finish! Thank you sounds so much smaller than the big meaning it holds. I am grateful everyday that I belong to you.

Without the support of my Grandmother and Granddaddy Lewis, I would still be several years away from this moment. You always knew just when the going got rough and swept in to save the day! Thanks for the days of banana milkshakes, arm tickles, buying shoes at Dairy Queen, and unconditional love.

To my Granny and Granddaddy Gillians, I miss you every day. I know that granddaddy would have hugged me around the neck and dragged me around to brag to all his friends, and granny would be all dressed up sitting front row and center cheering me on. I wish you could be here to share this day with me.

Lastly, much appreciation to my committee members, who each played a special role in this process: Dr. James Rinehart for the tireless suggestions to help me be my best, Dr. Kevin Hub for making me "drink the Kool-Aid," Dr. Jerry Palmer for patiently answering my statistical questions, and Dr. Jack Herlihy who supported me during my first years as principal and has graciously returned to support me once again. This is only the beginning!

ABSTRACT

The link between emotional intelligence and successful leadership in all organizations, including schools, is becoming stronger as new research is continually added to the field. Although it has already been established that emotionally intelligent leaders have a positive impact on the performance of their organization, research on the emotional intelligence specific to leaders of high-achieving middle schools is still evolving. Since emotional intelligence is a learned trait, this is especially important at the middle school level, where our nations' middle school students are falling woefully behind the majority of their international counterparts.

The purpose of this study is to investigate the emotional intelligence of principals of high-achieving middle schools and to determine whether these principals score higher in certain emotional intelligence competencies. Participants in this study were a sample of middle school principals serving in schools that were designated as a Middle School to Watch (MSTW), which is a nationally renowned recognition program for successful middle schools. This research is a quantitative study, employing descriptive and inferential statistics, analysis of variance, and correlational research designs. The independent variables include the demographic variables of principal gender, school socioeconomic status, and school's location in a rural vs. non-rural area. The dependent variable is the emotional intelligence scores of these principals as measured by the Emotional Competence Inventory 2.0 (ECI 2.0). The ECI 2.0 has internal reliabilities ranging from .68 to .87, measured using Chronbach's Alpha, for each of the eighteen emotional intelligence competencies.

Data was collected from survey respondents (n = 280) identified by participating national MSTW principals (n = 34) from 14 states. The analysis of data resulted in the following findings for the population represented in this study: principals of national MSTW exhibit high levels of emotional intelligence; there is no common set of emotional intelligent competencies shared by this group of MSTW principals; and, emotional intelligence of MSTW principals is not impacted by demographic factors of principal gender, location of the school, socioeconomic status of the school, or minority enrollment of the school.

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INTRODUCTION

Statement of the Problem

The past twenty years has brought an increased focus on school accountability, peaking with the No Child Left Behind Act of 2001. As a result of this law, the federal government is holding states, local school districts and public schools accountable for high levels of student performance. Schools are pressured through rewards, sanctions and public reporting to continually increase student achievement; principals are scrutinized for their ability, or inability, to lead schools to unprecedented levels of success. As a result, a greater focus has been placed on school leaders and their role in impacting student achievement.

Although research on effective leaders across all organizations has been prevalent for quite some time, the study of effective leaders in schools is a fairly new phenomenon, developing over the past 30 years. Much of this research has centered on elementary school or high school principals, with fewer studies available specific to the middle school principalship. Yet middle school principals have an especially challenging task under this new era of high-stakes accountability. They struggle with the overwhelming social and emotional demands of this age group which overshadow cognitive needs (Yecke, 2005). Although studies specific to middle grades leadership are sparse, there have been many studies that focus on the current state of middle grades programs in general. These studies show that the middle school reform effort taking place over the last few decades has been largely unsuccessful and some districts are choosing to

restructure into K-8 schools, eliminating middle schools and junior high schools altogether (McEwin, Dickinson, & Jacobson, 2004). There are mixed reviews about the success of these K-8 schools in meeting the academic needs of young adolescents (McEwin, et al., 2004).

Despite these obstacles, there are examples of successful principals leading high-achieving middle schools (Nelson, Fairchild, Grossenbacher, & Lander, 2007; Petzco, 2005). The National Forum for Accelerating Middle Grades Reform (NFAMGR) seeks to identify these high-performing middle schools through the national Middle Schools to Watch (MSTW) program, which recognizes successful middle schools across the nation to serve as models of excellence. Realizing that a successful school is about more than just test scores, NFAMGR maintains that successful middle schools excel in four areas: academic excellence, developmental responsiveness, social equity, and organizational support (Williams-Boyd, 2005). Schools that are named for this honor must complete a rigorous application process that includes an extensive written application, as well as a thorough site-visit and interviews with stakeholders, including teachers, staff members, administrators, parents, students, and community members. Schools are rated on 37 different criteria across the four areas of excellence, and they must show that they are high-performing in all four areas in order to be named a MSTW (see Appendix A).

Since 2002, 19 states have signed on to participate in the MSTW program, with more being added each year. 16 of these states are currently active in the program: Arkansas, California, Colorado, Georgia, Illinois, Indiana, Kentucky, Michigan, New Jersey, New York, North Carolina, Ohio, Pennsylvania, South Carolina, Utah and Virginia. At the time this research was conducted, there were 224 schools across these

states currently recognized as MSTW, with 90 of these exemplary middle schools being named in 2010 (http://www.mgforum.org/). Once a school is named they maintain the designation for three years, after which time they must reapply.

Effective leadership is a key consideration in the selection of a MSTW, and a prime factor of their success, permeating all four areas of excellence. A study conducted by McEwin & Greene (2010) compared "highly successful middle schools" across the nation, which included Schools to Watch, to randomly selected middle schools and determined that leadership is a critical component in the success of these nationally recognized schools. Eliminating middle schools entirely may not be the answer; rather, one strategy to improve middle school effectiveness is to study the leadership in these high-performing middle schools.

There are many theories surrounding the study of effective school leadership. One current theory in the improvement of school leaders is the idea that leaders who are emotionally intelligent will have a greater impact on the overall performance of their school. The concept of emotional intelligence (EI) has emerged in recent years as a predictor of leadership success in a variety of businesses, and the field of education is no exception (Cook, 2006; Bardach, 2008; Cherniss & Goleman, 2001). Emotional intelligence is "the capacity for recognizing our own feelings and those of others, for motivating ourselves and for managing emotions effectively in ourselves and others" (Hay Group, 2005, p. 2). EI is not an inherent trait, nor is it a behavior. Based on the same concept as the IQ model, EI is an intelligence model that encompasses a person's capacity to perceive, understand and manage emotions (Mayer & Salovey, 1997). Emotionally intelligent leaders have a significant positive impact on the bottom line of

their organization (Goleman, 1995). In a school system, the bottom line is student achievement.

Leithwood, Harris & Hopkins (2008) underscore the impact of the school leader on student achievement. Based on a comprehensive review of literature on successful school leaders, they make the following claims:

1. School leadership is second only to classroom teaching as an influence on student learning.
2. School leaders improve teaching and learning indirectly and most powerfully through their influence on staff motivation, commitment and working conditions.
3. A small handful of personal traits (i.e., confidence, open-mindedness, persistence, resiliency, optimism) explain a high proportion of the variation in leadership effectiveness.

These "personal traits" correspond to the research on emotional intelligence. Understanding the connection between leadership and emotional intelligence can bring additional insight to the research regarding principals of high-performing middle schools. The emotional intelligence competencies of MSTW principals are the focus of this research study.

Purpose

The purpose of this study is to describe the emotional intelligence competencies of national Middle Schools to Watch principals, and to compare differences within the overall emotional intelligence competency scores.

Specifically, this study will investigate the following research questions:

1. What is the emotional intelligence of national Middle Schools to Watch principals, as measured by the Emotional Competence Inventory (ECI 2.0)?
2. Do the national Middle School to Watch principals score higher in certain emotional intelligence competencies, as evidenced by differences between the overall mean competency scores on the Emotional Competence Inventory (ECI 2.0)?
3. Are there differences in the emotional intelligence competencies of male and female national Schools to Watch principals?
4. Are there differences in the emotional intelligence competencies of national Schools to Watch principals in rural and non-rural locations?
5. What is the relationship between the socioeconomic status of the school, measured by percentage of students receiving free or reduced lunch, and the emotional intelligence competencies of national Middle Schools to Watch principals?
6. What is the relationship between the minority enrollment of the school, measured by percentage of non-Caucasian students, and the emotional intelligence competencies of national Middle Schools to Watch principals?

The data from these questions will add to the current body of research and literature regarding the emotional intelligence of middle school principals that lead schools recognized as national Middle Schools to Watch. Since this honor is based in part on student achievement, this study may add evidence regarding the relationship between the emotional intelligence of principals and student achievement.

Rationale

This research investigates whether or not the principals of national Middle Schools to Watch are emotionally intelligent based on the results of the Emotional Competence Inventory (ECI 2.0), and also whether these principals as a group score higher in certain emotional intelligence competencies than others. Although it has already been established that emotionally intelligent leaders have a positive impact on the performance of their organization (Cherniss, 2002), research on the emotional intelligence specific to leaders of high-achieving middle schools is still evolving.

Defining what makes a "successful" or an "effective" or a "high-achieving" middle school differs from study to study. Although test scores should be an important factor in evaluating the overall achievement of a school, they should not be sole means of determining success. The literature on highly-effective middle schools identifies four areas that combine to create a successful middle school: academic excellence, developmental responsiveness, social equity, and organizational support (Williams-Boyd, 2005). Schools that have been named as national Middle Schools to Watch have demonstrated success in each of these four areas through a rigorous selection process. Therefore, principals of MSTW will be considered highly-effective and successful middle school leaders for the purposes of this study.

The results from this research have the potential to provide valuable information to school boards, school-based decision-making councils, instructors of educational leadership preparation and development programs, current middle school principals, and candidates for middle school principal positions as they seek to hire the most qualified

principals and improve the abilities of the existing principals in their local middle schools.

School boards and school-based decision-making councils can utilize the results of this study to determine which emotional intelligence competencies effective middle school leaders should possess. When considering applicants for a principal's position, screening for emotional intelligence and the targeted EI competencies may potentially lead to the selection of stronger, more competent candidates. Instructors of educational leadership preparation programs and developers of educational leadership professional development trainings could also benefit from this research. By designing courses and training opportunities which build on the specific emotional intelligence competencies that are most common among principals of high-achieving middle schools, they may produce more qualified and more effective principals. Middle school principal candidates and current middle school principals can learn from this research by reflecting on and self-assessing their own emotional intelligence competencies and working to improve those competencies that will ultimately allow them have more impact on the achievement of the school and the students.

Background

A positive relationship between emotional intelligence and highly effective leaders has already been established across a variety of occupations (Goleman, Boyatzis & McKee, 2002). Leaders who are emotionally intelligent have more impact on the profits, performance and productivity of the organization than their average performing

counterparts. In addition, they are more often identified as "star performers" by their colleagues and supervisors (Goleman, Boyatzis & McKee, 2002).

Cherniss (2002) explored this connection between emotionally intelligent employees and their impact on organizations. His findings point decisively to the need to nurture emotional intelligence competencies in the workplace. For example, Cherniss (2002) reports that in studies across a variety of disparate occupations, such as mechanics, sales, and accounting, emotionally intelligent employees are 127% more productive than their colleagues. A multinational makeup corporation netted almost $2 million in revenue from their emotionally intelligent sales agents, which was a significant difference compared to the revenue generated by other sales agents. In a large beverage company, the executives who were selected on the basis of their emotional intelligence performed in the top third of all executives. When emotional intelligence is used as part of the screening process for selecting recruiters for the U. S. Air Force, the recruiters are three times more likely to be successful. Emotionally intelligent partners in an international consulting agency brought in $1.2 million more profit than the other partners (Cherniss, 2002). These are just a few examples of the impact that emotionally intelligent leaders have on the workplace, regardless of location or type of organization.

The field of education does not measure its success in dollars and cents, but rather, in increased levels of student achievement. For that reason, it is more difficult to study the impact of a school leader's emotional intelligence on the organization because the product, student performance, is more difficult to measure than monetary gains. However, some recent studies indicate a link between emotional intelligence and the performance of school leaders.

Cook (2006), in a study of elementary school principals, found that emotional intelligence had a significant impact on leadership performance. Results from a MANOVA test showed that the elementary principals for whom emotional intelligence was a high strength had significantly higher scores in all nine assessed leadership performance standards than did their colleagues for whom emotional intelligence was not a strength. The leadership performance standards assessed by this study were: leadership attributes, visionary leadership, community leadership, instructional leadership, data driven improvement, organization to improve student learning, organization to improve staff efficacy, cultural competence, and education management.

A study by Bardach (2008) investigated how the emotional intelligence of middle school principals impacted the school's ability to meet federal Annual Yearly Progress (AYP) targets, which are based on student achievement scores. A logistic regression was used to determine that for every increase in a principal's emotional intelligence score, the odds that the school would meet their AYP targets also went up. According to Bardach (2008), a principal's overall emotional intelligence is a significant variable in school success.

Cherniss and Goleman (2001) cite a study conducted with school leaders in the United Kingdom. The results of this study indicate that school leaders with more emotional intelligence abilities have teachers with more positive attitudes and students with higher grades. School leaders exhibiting fewer emotional intelligence abilities had higher rates of demoralized teachers and underperforming students. This study concludes that leaders with higher levels of emotional intelligence directly improve the climate of the school, which has been linked to increased levels of student achievement.

Stone, Parker & Wood (2005) conducted a study on nearly 500 principals and vice-principals in Ontario. The purpose of the study was to investigate the relationship between emotional intelligence and school leadership. These school leaders were grouped into above-average and below-average leaders based on ratings from subordinates and superiors, and then the emotional intelligence competencies of each of these groups were compared. Findings from this study indicate that total emotional intelligence was a significant predictor of successful school administration. In addition, the above-average leaders exhibited certain specific emotional intelligence abilities that differentiated them from the below-average group, including self-awareness, self-actualization, empathy, interpersonal relationships, flexibility, problem-solving and impulse-control.

A research paper by Williams (2008) compared the emotional and social intelligence competencies of twelve outstanding urban school principals to eight typical urban principals. She found that the outstanding principals consistently demonstrated emotional and social intelligence competencies more often than the typical principals, and found significant differences in five areas of emotional intelligence: self-confidence, self-control, conscientiousness, achievement orientation and initiative.

These results are just a sampling of the research being conducted on the emotional intelligence of school leaders. What is not consistent is the EI model being used to investigate the emotional intelligence competencies of school leaders – some researchers prefer the model of Mayer-Salovey model, while others opt for Bar-On's or Goleman's or other models, depending on the focus on the study. However, regardless of the model used to frame the study, the results from the field of education parallel the findings of

current emotional intelligence research in other businesses and organizations – there appears to be a positive link between the emotional intelligence of leaders, including school leaders, and the overall performance of the organization.

Since this link exists, screening for and selecting emotionally intelligent school leaders could potentially be a way to help a school or school system improve its bottom line in terms of student achievement. Unfortunately, schools are not always able to replace low-performing or ineffective leaders. Is it possible, then, to improve the emotional intelligence levels of existing school leaders? Goleman, Boyatzis & McKee (2002) answer this question with a resounding, "Yes!" Although some people are naturally more emotionally intelligent than others, everyone can improve with the right training and development programs. EI training programs that target the brain's limbic areas and focus on motivation, extended practice, and feedback through a coaching model are the most effective. Through this type of nurturing, emotional intelligence can be learned, improved and sustained for years. According to Goleman, Boyatzis & McKee (2002), a leadership development program for MBA students utilizing this model was studied at the Weatherhead School of Management at Case Western Reserve University, with dramatic results:

- Two years after exiting an MBA program, participants showed 47% improvement in self-awareness competencies and a 75% improvement in social awareness and relationship management competencies;
- There was documented improvement in every single competency that was specifically targeted, indicating that every EI competency is learnable;

- Five to seven years after the conclusion of the program, participants were still improving on additional competencies, indicating they continue to develop new emotional strengths.

The idea of EI as a learned rather than an inherent trait is especially important at the middle school level, where our nations' middle school students are falling woefully behind the majority of their international counterparts (Yecke, 2005). Yecke (2005) cites a telling statement from the Trends in International Math and Science Study (TIMSS): "Middle school is where the achievement of American children begins to plummet relative to that of children in other developed nations" (p. 1). Referring to TIMSS international comparisons from 4th to 8th grade in a policy brief for the U. S. Department of Education, Dr. William Schmidt states, "U. S. students don't start out behind. They fall behind" (Yecke, 2005, p. 14).

School districts and universities across the nation seek to build stronger, more effective middle grades leaders through leadership preparation programs, professional development offerings, and on-the-job mentoring and coaching support systems in an effort to reverse this trend of poor student performance. Screening for, identifying and improving emotional intelligence competencies in these leaders could be a useful method for hiring the best leaders for the job, as well as for improving the performance of the leaders that are already in place.

Limitations of the Research

Limitations to this study are as follows:

- The scope of this research is limited to the 16 states that are currently active in the national Middle Schools to Watch (MSTW) program: Arkansas, California, Colorado, Georgia, Illinois, Indiana, Kentucky, Michigan, New Jersey, New York, North Carolina, Ohio, Pennsylvania, South Carolina, Utah and Virginia. Out of these states, no principals from Michigan or South Carolina had valid survey results, so 14 states are represented in the study.
- Since the survey is a 360° model, the participating principal, not the researcher, chooses the respondents who will complete the emotional intelligence competency instrument.
- This population of MSTW principals does not lend itself to a comparison group because it cannot be assumed that just because a school has not been named a MSTW, then that school is not high-achieving. Therefore, the results of this study will provide information about the emotional intelligence of this group of principals, but not if those results are similar to or different from principals of lower-achieving schools.
- All current MSTW principals who met the criteria were allowed voluntary participation in the study, so the respondents might not be a true representative sampling of the population.
- There was a low response rate of 22% for this study (n = 34). 49 out of 154 eligible principals provided consent to participate, but only 34 completed the survey requirements and could be included in the study.

Definition of Terms

1. *Emotional Intelligence*

   EI is defined as "the capacity for recognizing our own feelings and those of others, for motivating ourselves and for managing emotions effectively in ourselves and others" (Hay Group, 2005, p. 2). It is an intelligence model that encompasses a person's capacity to perceive, understand and manage emotions (Mayer & Salovey, 1997).

2. *Emotional Intelligence Clusters*

   The EI clusters consist of four overarching emotional intelligence capacities, including self-awareness, self-management, social awareness and relationship management (Hay Group, 2005).

3. *Emotional Intelligence Competencies*

   There are eighteen specific emotional intelligence capabilities linked to one of the four EI clusters: emotional awareness, accurate self-assessment, self-confidence, emotional self-control, transparency, adaptability, achievement, initiative, optimism, empathy, organizational awareness, service orientation, developing others, inspirational leadership, change catalyst, influence, conflict management, and teamwork & collaboration (Hay Group, 2005).

4. *Middle Schools/Middle Grades Schools*

   Middle schools, or middle grades schools, are "those serving young adolescents in any structural combination of grades 5 through 9" (Petzko, 2005, p. 2).

5. *National Forum to Accelerate Middle Grades Reform (NFAMGR)*

   "An alliance of over 60 educators, researchers, national associations and officers of professional organizations and foundations committed to promoting the academic performance and healthy development of young adolescents" (www.mgforum.org). The forum accomplishes this through developing and disseminating best practices, policies, leadership development programs, and criteria for identifying high-performing middle-grades schools.

6. *National Schools to Watch*

   An initiative of the National Forum to Accelerate Middle Grades Reform that identifies and recognizes high-performing middle-grades schools across the nation. Schools must complete a rigorous application and site-visit process, and must demonstrate they meet the needs of young adolescents by being academically excellent, developmentally responsive and socially equitable through strong organizational structures and procedures (www.schoolstowatch.org).

Conclusion

It has been established that emotionally intelligent leaders have a significant positive impact on the productivity of organizations in the business sector. The connection between emotional intelligence and effective school leaders, including leaders of high-achieving middle schools, is still in the developmental stages, although several studies exist showing a positive connection between these two variables. It has not been determined which, if any, emotional intelligence clusters or competencies are common

among effective middle school leaders. The specific emotional intelligence competencies of the middle school leader, or the lack thereof, may be an important factor in the success of the school. This study contributes to this gap in the research on emotional intelligence and the link to successful middle school leaders.

CHAPTER 2

REVIEW OF LITERATURE

Introduction

There is an abundance of research attempting to pinpoint a formula for effective school leadership, resulting in myriad school leadership theories and models. Each new study expands the knowledge base of what it means to be an effective school leader and clarifies the impact of the principal on student achievement. Emotional intelligence has emerged as a model of effective leadership across the business specter, and its connection to school leadership is currently being explored. The emotional intelligence of school leaders plays a role in school improvement, helping to fill the gaps in current research as to which leadership competencies contribute to school success.

This literature review will discuss the evolution of emotional intelligence research, including the three most prevalent models by Salovey and Mayer, Bar-On, and Goleman. Next, the research on the traits and behaviors of effective school principals, including a specific focus on those in the middle grades settings, will be examined. Finally, the connections between emotional intelligence and the traits and behaviors of effective school principals, as well as the relationship to national school leadership standards, will be presented.

Emotional Intelligence Defined

As of yet, no one leadership theory, no set of characteristics, no list of behaviors have answered the question of why effective principals are effective. That is because

successful leaders have a human focus which can't be defined through a set of practices; they must have the ability to work with a variety of different people, motivating them and helping them achieve the goals of the organization (Hauser, 2001). Daniel Goleman, author of several books and articles on emotional intelligence, calls these leaders emotionally intelligent. Emotional intelligence (EI) is "the capacity for recognizing our own feelings and those of others, for motivating ourselves and for managing emotions effectively in ourselves and others" (Hay Group, 2005, p. 2). Justice & Espinoza (2007) state that, ". . . emotional intelligence is the single most important influencing variable in personal achievement, career success, leadership and life satisfaction." While this claim might sound a bit overstated, there are a number of research studies that point to a definitive relationship between a person's EI and their personal and professional success. EI is not an inherent trait, nor is it a behavior. Based on the same concept as the IQ model, it is an intelligence model that encompasses a person's capacity to perceive, understand and manage emotions (Mayer & Salovey, 1997). Emotional intelligence is much more than just demonstrating an upbeat personality; it is the ability to understand how one's emotions can impact the moods and performance of others around him in both positive and negative ways.

The Evolution of Emotional Intelligence Theory

Salovey and Mayer's Four-Branch Ability Model of Emotional Intelligence

The term emotional intelligence was coined by Salovey and Mayer in 1990 who introduced it as an intelligence model framed on the work of the IQ model, only dealing with emotions instead of cognition (Salovey & Mayer, 1990). Their initial framework

was further revised in 1997, resulting in a Four-Branch Model of Emotional Intelligence. This is an ability-based model which focuses on how emotions contribute to intelligent thought and cognition, and also how emotional reasoning contributes to decisions and actions in everyday life (Mayer & Salovey, 1997).

The branches of their model are arranged from relatively basic psychological processes, which include perception, appraisal and expression of emotion on the first branch, to more complex psychologically integrated processes which require reflective regulation of emotions on the fourth and last branch. Each branch is split into four abilities, for a total of 16 emotional intelligence abilities. These abilities are then organized from early developing abilities to abilities that take longer to develop. An outline of Salovey & Mayer's Four-Branch Model of Emotional Intelligence follows (Mayer & Salovey, 1997, p. 37).

1. Perception, Appraisal, and Expression of Emotion
    - Ability to identify emotion in one's physical states, feelings and thoughts
    - Ability to identify emotions in other people, designs, artwork, etc., through language, sound, appearance and behavior
    - Ability to express emotions accurately, and to express needs related to those feelings
    - Ability to discriminate between accurate and inaccurate, or honest versus dishonest expressions of feeling
2. Emotional Facilitation of Thinking
    - Emotions prioritize thinking by directing attention to important information

- Emotions are sufficiently vivid and available that they can be generated as aids to judgment memory concerning feelings
- Emotional mood swings change the individual's perspective from optimistic to pessimistic, encouraging consideration of multiple points of view
- Emotional states differentially encourage specific problem approaches such as when happiness facilitates inductive reasoning and creativity

3. Understanding and Analyzing Emotions; Employing Emotional Knowledge
    - Ability to label emotions and recognize relations among the words and the emotions themselves, such as the relation between liking and loving
    - Ability to interpret the meanings that emotions convey regarding relationships, such as that sadness often accompanies a loss
    - Ability to understand complex feelings: simultaneous feelings of love and hate, or blends such as awe and a combination of fear and surprise.
    - Ability to recognize likely transitions among emotions, such as the transition from anger to satisfaction, or from anger to shame
4. Reflective Regulation of Emotions to Promote Emotional and Intellectual Growth
    - Ability to stay open to feelings, both those that are pleasant and those that are unpleasant
    - Ability to reflectively engage or detach from an emotion depending upon its judged informativeness or utility
    - Ability to reflectively monitor emotions in relation to oneself and others, such as recognizing how clear, typical, influential, or reasonable they are

- Ability to manage emotion in oneself and other by moderating negative emotions and enhancing pleasant ones, without repressing or exaggerating information they may convey

Since Salovey and Mayer introduced the concept twenty years ago, two other widely accepted models of emotional intelligence have emerged.

The Bar-On Conceptual Model of Emotional-Social Intelligence

Bar-On extended the work of Salovey and Mayer, framing the idea of EI in terms of well-being and behavior (Bar-On, 1997; Goleman, 1995). Bar-On's model offers a broader perspective on emotional intelligence than Salovey and Mayer. His model encompasses both social and emotional factors when developing and measuring EI. He asserts that emotional and social competencies are interrelated and the combination of these determine how well we can manage ourselves, interact and relate with others, and manage the daily challenges of life. The Bar-On model is based on the idea that high-levels of social and emotional functioning will lead to high levels of psychological well-being (Bar-On, 2007).

The Bar-On model (1997) identifies five overall meta-factors that conceptualize emotional-social intelligence. Each of the meta-factors is broken down into subfactors of related competencies, skills and facilitators. Overall, there are 15 emotional intelligence subfactors described and measured by Bar-On's model. An outline of the Bar-On model follows.

1. Intrapersonal – Self-awareness and self-expression
    - Self-regard
    - Emotional self-awareness

- Assertiveness
- Independence
- Self-actualization

2. Interpersonal – Social awareness and interaction
    - Empathy
    - Social responsibility
    - Interpersonal relationship
3. Stress Management – Emotional management and control
    - Stress tolerance
    - Impulse control
4. Adaptability – Change management
    - Reality
    - Flexibility
    - Problem solving
5. General Mood – Self-motivation
    - Optimism
    - Happiness

Bar-On (1997), like other EI researchers, upholds the idea that when we can make our emotions work for us and not against us, we will be happier, better-adjusted and more effective in many aspects of our lives.

Goleman's Model of Emotional Competencies

Goleman extended Bar-On's concept of life effectiveness by focusing on the role of EI in life success, work performance and leadership (Goleman, 1995, 1998a, 1998b, 2000; Goleman, Boyatzis & McKee, 2001). Unlike the other models, which provide assessment of an individual's EI and how that contributes to personal well-being and life satisfaction, Goleman's model measures EI and how that contributes to an individual's impact on the workplace. Although the other models have been used in research to measure workplace effectiveness, Goleman's model is the only one with a specific focus centered on EI competencies as they relate to the workplace.

What are the emotional competencies leading to greater success in life and the workplace? Goleman's (2000) EI framework categorizes eighteen emotional intelligence competencies grouped into four overall clusters (Hay Group, 2005) (See Table 2.1).

In summary, these three conceptual frameworks have led to three different models guiding emotional intelligence research.

1. *Mayer-Salovey Model* – An ability to perceive, understand, manage and use emotions to facilitate thinking.
2. *Bar-On Model* -- A cross section of interrelated emotional and social competencies, skills and facilities that impact intelligent behavior.
3. *Goleman Model* -- An array of emotional and social competencies that contribute to managerial performance.

These models are not necessarily conflicting; rather, each one has a place in the research depending on the participants and the purpose of the study. Because of its specific focus on the role of emotional intelligence in workplace productivity and

Table 2.1. Goleman's emotional intelligence framework

Clusters	Description	Competencies
Self-Awareness	The ability to know one's internal states, preferences, resources, and intuitions	Emotional Awareness
		Accurate Self-Assessment
		Self-Confidence
Self-Management	The ability to manage ones' internal states, impulses, and resources	Emotional Self-Control
		Transparency
		Adaptability
		Achievement
		Initiative
		Optimism
Social Awareness	The ability to handle relationships and awareness of others' feelings, needs, and concerns	Empathy
		Organizational Awareness
		Service Orientation
Relationship Management	The skill or adeptness at inducing desirable responses in others	Developing Others
		Inspirational Leadership
		Change Catalyst
		Influence
		Conflict Management
		Teamwork and Collaboration

Source: Adapted from Hay Group. (2005, November). *Emotional Competence Inventory (ECI) technical manual*. Boston: Steven B. Wolff.

leadership effectiveness, the Goleman Model is the model used for the purposes of this research study.

The Goleman Model and Leadership

Although all three of the models overlap in some of their competencies, Goleman's framework has been specifically designed to identify EI competencies that impact workplace productivity and organizational leadership. Like any competency model, it is not expected that a person must score high in all competencies to be considered emotionally intelligent. The competencies within each cluster are interrelated, so demonstrating one competency may compensate for demonstrating less of another, and the use of some of the competencies may vary by location and situation (Hay Group, 2005). So how many competencies must a person possess in order to be considered emotionally intelligent? An analysis of studies by McClelland (as cited in Goleman, 2000) was conducted to determine if there was a difference in the number of emotional competencies highly productive leaders possessed compared to their less productive counterparts. These studies determined that workers who exhibited six or more of these competencies were more successful and productive leaders than those who exhibited fewer competencies. Goleman (1998b) agrees that six or more competencies are necessary, but adds that they must be spread out across the four EI clusters. As a matter of fact, a study at PepsiCo showed that 87% of leaders who possessed at least six competencies from across the spectrum of clusters performed in the top third of employees (Goleman, 1998b).

Studies about the impact of emotionally intelligent employees on the organization result in many positive findings. Cherniss (2002) reports that in studies across a variety of disparate occupations, such as mechanics, sales, and accounting, emotionally intelligent employees are 127% more productive than their colleagues. Emotionally intelligent sales agents in a multinational makeup corporation sold nearly $100,000 more than the sales agents who had not been screened for emotional intelligence competencies, resulting in a net revenue increase of over $2 million. When emotional intelligence is used as part of the screening process for selecting recruiters for the U. S. Air Force, the recruiters are three times more likely to be successful. Emotionally intelligent partners in an international consulting agency brought in $1.2 million more profit than the other partners (Cherniss, 2002). These are just a few examples of the impact that emotionally intelligent leaders have on the workplace.

Although the impact of EI has been widely studied across a variety of business sectors, its impact in the area of education is just beginning to be explored. It is hypothesized that because emotional intelligence can be linked to more productive and successful leaders outside of the field of education, that it may also be a contributing factor to successful school leaders. More research in this field needs to be conducted before any final determinations can be made, but there are some promising results.

A study by Bardach (2008) showed a significant correlation between the EI of principals and schools that were successful in meeting national Annual Yearly Progress (AYP) goals. He found that the likelihood of the school making AYP status significantly increased with every point increase on the principal's total EI score. Sala (2003) conducted a study on college principals in the United Kingdom. His findings indicate a

correlation between high student performance on a nationally normed standardized test and high principal EI scores. The areas of self-awareness and social skills for the principals were most highly correlated to higher levels of student performance. Stone, Parker & Wood (2005) conducted a study on nearly 500 principals and vice-principals in Ontario to investigate the relationship between emotional intelligence and school leadership. Findings from this study indicate that emotional intelligence was a significant predictor of successful school administration. A research paper by Williams (2008) compared the emotional and social intelligence competencies of outstanding and typical urban school principals. She found that the outstanding principals consistently demonstrated emotional and social intelligence competencies more often than the typical principals, and found significant differences in five areas of emotional intelligence: self-confidence, self-control, conscientiousness, achievement orientation and initiative.

The empirical research on EI is still in the early stages, so the findings are not widely accepted yet (Mayer & Cobb, 2000; Matthews, Roberts & Zeidner, 2004). However, more and more research studies are starting to build scientific evidence for EI within the social sciences (Bardach, 2008). The link between EI and successful leadership in all organizations, including schools, is becoming stronger as new research is continually added to the field.

EI versus IQ

The basic premise upholding the study of EI is that general intelligence, i.e., IQ, is not the best indicator of life and workplace success (Goldenberg, Matheson & Mantler, 2006). In fact, Goleman (1995, 1998b) asserts that EI matters more than IQ in

determining who will be a more productive employee and who will be a better leader. The more demanding and intellectually challenging the job is, the more this difference comes into play. IQ and technical skills are assumed to be entry-level capabilities to land a professional job, but he contends it is the emotional intelligence factor that determines who excels (Goleman, 1995).

According to some studies, IQ comes in second to EI in determining outstanding job performance in a variety of different jobs. In these studies, IQ accounted for only 4% to 25% of job success, while as much as 90% of that success could be linked to EI (Goleman, 1998b). Additional studies on the impact of emotional intelligence and workplace success show that emotional intelligence accounts for 85% of the difference between high-performing workers and workers that are labeled as average (Cook, 2006). In part, this can be attributed to the leader's actions and mood. Studies looking at working climate alone can rate an organization as high or low performing with 75% accuracy (Bardach, 2008), thus, it is imperative that leaders be able to affect climate. Emotionally competent leaders positively impact the working climate, which permeates the productivity of the entire organization. General leadership studies have shown that emotional intelligence outweighs job experience and IQ as a predictor of successful job performance (Buntrock, 2008). Therefore, when comparing technical skills, IQ and EI for highly effective leaders, EI was twice as important as the other factors in all jobs and organizations studied (Goleman, 1998a).

This does not mean that IQ and EI are conflicting or opposing forces, or that IQ is not important or necessary; in fact, they are completely separate competencies and one does not impact the other (Goleman, 1995). A person can have high IQ and low EI, or

just the opposite, or any combination thereof. It does appear from the research that IQ should be a prerequisite for professional employment. However, it is EI, more so than IQ, that unlocks a person's full potential in workplace success, giving him the ability to focus on his work, to think clearly and to perform at maximum levels of productivity (Goleman, 1995, 1998b).

Some critics state that EI is just a glorified new name for what has been known for years in psychological research as personality psychology (Matthews, Roberts & Zeidner, 2004; Mayer & Cobb, 2000). In one sense, this is true – EI has been talked about for decades with labels such as "character," "personality," "soft skills," and "competence" (Goleman, 1998b). However, the research on EI goes beyond mere personality traits as an indicator of life success. EI includes factors, such as personality traits, which are an indication of a person's potential for learning and demonstrating practical emotional skills; but, a person who is identified as emotionally intelligent also has the ability to convert and apply that intelligence, which is what leads to high levels of performance (Goleman, 1998b; Wakeman, 2006).

Measuring Emotional Intelligence

EI continues to improve and grow throughout life (Cook, 2006; Goleman, 1998a, 1998b). Emotional intelligence can be learned if a person is willing (Buntrock, 2008). Assessing one's EI is the first step down the path of improving one's EI. There are an abundance of EI assessments on the market (this researcher discovered over 25 in a short hour-long internet search, with more available), each one based on a particular EI model.

Selecting an instrument that is valid and reliable while best meeting the needs of the study can be a daunting task.

There are three main types of EI measurements: self-reporting inventories, performance/ability-based measures, and 360º instruments. Self-reporting inventories, by far the most common type, include a questionnaire or survey which the candidate completes on his or her own. Performance/ability-based measures present candidates with actual scenarios and tasks; they are asked to either describe how they would respond to a given scenario, or they are presented with a task and their reaction to the situation is observed and evaluated. A 360º instrument includes survey responses from a variety of other people who are close to the candidate, both personally and professionally (Goldenberg et al., 2006).

There is disagreement over which of the three types is the best measurement (Goldenberg et al., 2006). Performance and ability measures are more reliable than self-report measures, but they are time-consuming and expensive, making them not conducive to measuring large numbers of candidates. Self-report inventories are the most prominent, probably because they are the easiest, fastest and most cost-effective to administer, but the disadvantages of this measure must be noted. Self-reporting instruments reflect self-perceptions which may or may not correlate with reality. The reporter must possess self-knowledge and awareness to be able to report accurately; since this in and of itself is an EI trait, it is difficult to ensure accuracy of the responses. Also, self-reports have a tendency to overlap with personality and temperament traits, rather than actual EI (Goldenberg et al., 2006). Due to these concerns, when a performance or ability measure is not feasible, it is best to go with an assessment that is a 360º model,

which includes surveys from subordinates, supervisors, and personal acquaintances, to get a more accurate assessment (Hartley, 2004).

Although there are many EI measurements available on the market, many of these are not true measures of EI, or are not based on sound research or accepted EI models. The instrument an individual or researcher chooses to use to measure emotional intelligence is entirely dependent on the purpose of the research project. With so many instruments available, both for free and at a cost, it can be difficult to decide which instrument to use. Table 2.2 presents six widely accepted EI measurement instruments that commonly appear throughout EI research and literature.

After reviewing the instruments, it is the opinion of the researcher that the MSCEIT is the best choice for general studies of overall emotional intelligence of individuals due to its performance-based nature. It has high internal reliabilities and is the only performance EI assessment on the market. It is expensive, however, so it would not be feasible to use for studies with large sample sizes. In studies where use of the MSCEIT is not feasible, the SSEIT would be an acceptable second choice. It is recognized by the makers of the MSCEIT as an alternative to the MSCEIT, although it does not provide the same comprehensive detail (Statistics Solutions, 2009).

If the study is based on leadership potential or workplace performance, then the ECI 2.0 would be the ideal choice. It specifically measures potential for success in the workplace and provides a variety of reports and developmental tools for use by the organization. The ECI is a 360° instrument, which is the most acceptable choice when a performance-based measure is not practical. Although the Genos model also measures workplace success, it is not based on a widely accepted model of EI and the EI scales it

Table 2.2. Comparison of six commonly used instruments for measuring emotional intelligence

Name	EI Model	Type	# of Items/ Time to Administer	Type of Rating Scale	Reliability Cronbach's alpha
Emotional Quotient Inventory (EQ-i)	Bar-On	Self-report	133 items 30 minutes	Likert-type	.69 - .86 for each competency (Bar-On, 2007)
	Intended Audience/Purpose Provides information about how people cope with surroundings and environmental pressures • Training programs for business professionals • Treatment programs for mental health care • Social development of children (Multi-Health Systems, 2009*a*; Multi-Health Systems, 2009*b*; Bar-On, 2007*)*				
Emotional Competence Inventory 2.0 (ECI 2.0)	Goleman	360º Multi-Rater	72 items 30-45 minutes	Likert-type	.68- .87 for each competency (Hay Group, 2005)
	Intended Audience/Purpose Measures emotional competencies that contribute to effectiveness in the workplace • Overall picture of emotional competence of an organization • Development of training programs for an organization (Hay Group, 2005; Hay Group, 2009; Goleman, 1998*b)*				
Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT)	Mayer-Salovey	Performance Ability-Based	141 items 45-60 minutes	Varies by item	.76-.91 for each competency (Mayer, Salovey & Caruso, 2004)
	Intended Audience/Purpose General identification of overall emotional intelligence of an individual • Employee recruitment • Development of leadership training programs • Identification of root causes and treatment plans in mental health care • Providing self-awareness and focus for improvement for individuals (Multi-Health Systems, 2009*c*; Multi-Health Systems, 2009*d*; UNH, 2009; Emotional IQ, 2009*b)*				

Table 2.2. (Continued)

Name	EI Model	Type	# of Items/ Time to Administer	Type of Rating Scale	Reliability Cronbach's alpha
Schutte Self-Report Emotional Intelligence Test (SSEIT)	Mayer-Salovey	Self-Report	33 items 10 minutes	Likert-type	.87 - .90 on overall EI score (Zeng & Miller, 2001)
	Intended Audience/Purpose Measures self-perceptions about how well an individual can identify and control emotions in self and others (Lane et al., 2009; Schutte et al., 1998; Statistics Solutions, 2009; Emotional IQ, 2009*a*)				
Six Seconds Emotional Intelligence Test (SEI)	Mayer-Salovey and Goleman	Self-Report	104 items 20 minutes	Likert-type	.73 - .84 for each competency (Six Seconds, 2008)
	Intended Audience/Purpose Provides feedback about an individual's emotional intelligence in order to develop a plan for improving these skills • Personal and professional growth • Screening, coaching, training and hiring in the workplace • Support tool for educators and counselors to assist students with problematic behaviors • Providing information for career counseling • Helping improve mental preparation of athletes (Six Seconds, 2008; Six Seconds, 2009**)**				
Emotional Intelligence Questionnaire (EIQ16)	Mayer-Salovey	Self-Report	136 items 15-20 minutes	Likert-type	.69 on overall EI score (My Skills Profile, 2009)
	Intended Audience/Purpose Provides the participant with feedback about his or her emotional intelligence; raises self-awareness that can lead to improved management of emotions (My Skills Profile, 2004; My Skills Profile, 2009)				

measures are less defined than the scales measured by the ECI 2.0. The ECI 2.0 is an expensive choice for general organizational use, but the Hay Group offers free use of the instrument for approved research projects, making it accessible to the general researcher.

The Emotional Competence Inventory 2.0 (ECI 2.0)

This research study will be based on Goleman's model of emotional intelligence, and therefore will use the Emotional Competence Inventory 2.0 (ECI 2.0) as the measurement instrument. The ECI 2.0 is the assessment tool specifically designed to measure Goleman's framework of emotional intelligence (Hay Group, 2005). The ECI 2.0 measures 18 emotional intelligence competencies grouped into four overall clusters of self-awareness, social awareness, self-management and social skills (see Table 2.1). These competencies are based on Daniel Goleman's research findings presented in his book *Working with Emotional Intelligence* (1998*b*). The main function of the ECI 2.0 is to measure emotional competencies that contribute to effectiveness in the workplace (Hay Group, 2005). Since Goleman (1998*b*) asserts that emotional competencies can be learned, the purpose of the ECI 2.0 is that of development.

The ECI 2.0 questionnaire consists of 72 total items, four items for each of the 18 different competencies. A self-assessment questionnaire, as well as similar questionnaire for outside raters, is available. However, it is recommended that outside raters be used exclusively whenever possible as the results will be more reliable. A 5-point Likert-type scale is used with the following options: never, rarely, sometimes, often, and consistently. In addition, a "Don't Know" option is a valid choice.

The ECI 2.0 is a 360º multi-rater instrument that includes a self-assessment questionnaire as well as questionnaires to be completed by family members, friends and/or professional colleagues of the participant. Each rater instrument takes around 20 minutes to complete (Hay Group, 2005). The Hay Group (2005) does not recommend that self-assessment data for the ECI 2.0 be used in isolation to determine emotional intelligence for research purposes. They have found that there is often a significant difference between the results of self-rater instruments and the results of outside raters. That is why the ECI 2.0 was developed as a multi-rater instrument. In addition, there is an ECI-U assessment available for use in university settings to measure the emotional intelligence of students.

The ECI 2.0 has been used in numerous workplace research studies in a variety of occupations all over the world: college administrators, bankers, call center workers, school principals, factory supervisors, fire fighters, accountants, athletic coaches, paramedics and Parish leaders, to name a few (Hay Group, 2005). The normative sample for the ECI 2.0 consists of nearly 21,000 participants worldwide. The norms are gender-specific, with different norms existing for men and women. In addition, there are norms available by job function, geographical region and job level (Hay Group, 2005).

The internal reliabilities for the ECI 2.0, measured by Cronbach's alpha, range from .68 to .87 for each of the 18 competencies, with an overall average reliability of .78. Internal reliabilities (also in the form of Cronbach's alpha) were also determined for "others" versus "self" ratings. Internal consistency ranges from .73 - .92 for "others" ratings, and from .60 - .85 for "self" ratings (Hay Group, 2005). The assessment also has

a high predictive validity toward workplace performance, and various studies indicate that it has good construct, criterion and discriminant validity (Hay Group, 2005).

The Impact of the Principal on Student Achievement

Although the research on EI has mostly centered on business organizations, there are definite implications for educational leadership. Since schools are people-centered places where a positive culture is important, the idea that effective school leaders might possess EI competencies is not a big leap. Emotionally intelligent leaders create positive organizational cultures, which in turn lead to higher levels of productivity and achievement (Leithwood et al., 2008). This line of reasoning runs parallel to the current research on effective school leaders.

"The principal is the single most influential person in a school" (Marzano, Waters & McNulty, 2005, p. 5), and a school's effectiveness, or ineffectiveness, can often be traced directly back to the leader's doorstep. In fact, the principal is the #2 factor, second only to direct classroom instruction, among all school-related factors that impact student achievement (Leithwood, Harris & Hopkins, 2008; Nettles & Herrington, 2007; Marzano, Waters & McNulty, 2005). It is difficult to find instances in which a school has successfully turned around the achievement of its students without the presence of an effective school leader (Leithwood et al., 2008). That is a big responsibility for school administrators to bear, especially in the current system of high-stakes accountability. Continuing research about effective school leaders is critical because that one individual can impact the achievement of thousands of students over the duration of his or her career (Nettles & Herrington, 2007).

Principals do not have a direct effect on student achievement. They are not delivering instruction or interacting with an assigned group of students on a daily basis. But, numerous studies show that principals do have an indirect impact through their behaviors, decisions and actions (Hallinger & Heck, 1998; Hauser, 2001; Powell, 2004). The principal has a direct effect on teacher motivation and school climate, which leads to improved classroom practice, which in turn leads to increased pupil learning and achievement (Leithwood et al., 2008).

Studies have been conducted to determine the impact of this indirect effect. In a meta-analysis of approximately 50 research studies across all types of schools, Hallinger and Heck (1998) found that the classroom teacher and the level of instruction accounted for a third of the variation in student learning, but school leadership accounted for an additional one-fourth of that variation. Additionally, Waters, Marzano & McNulty (2003) conducted a meta-analysis on the impact of education leadership on student achievement, which included a quantitative analysis of 30 years of research and an exhaustive review of theoretical literature. They found that the average effect size, expressed as a correlation, between student achievement and leadership is .25. Through that same analysis, Waters et al. (2003) identified 21 responsibilities for successful school leaders, which were eventually incorporated into Marzano, Waters and McNulty's (2005) highly successful leadership book, *School Leadership that Works* (See Table 2.3).

They determined that a principal who showed improvement in each of these responsibilities could produce as much as a ten percentile point gain in student achievement. The importance of an effective principal cannot be denied.

Table 2.3. Balanced leadership: 21 responsibilities and practices of effective school leaders

	Areas of Responsibility	Description *The extent to which the principal . . .*
1.	*Affirmation*	Recognizes and celebrates schools 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/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/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

Source: Adapted from Marzano, R. J., Waters, T. & McNulty, B. A. (2005). *School leadership that works: From research to results.* Aurora, CO: Mid-continent Research for Education and Learning.

Traits and Behaviors of Effective School Principals

The research on educational leadership is mainly focused on theoretical frameworks and "long-term constructs" (Spillane, Halverson & Diamond, 2001) of effective instructional leadership, but it is more difficult to determine how these constructs are put into actual practice by school leaders in their daily work (Bauck, 1987; Marzano, et al., 2005; Spillane, et al., 2001; Taylor, 2007). If a school principal recognizes that he is ineffective, theories provide little direction on how to actually go about making the necessary changes. Principals often don't understand how to apply theoretical knowledge to their current practice.

Spillane, et al. (2001) coined the terms "macrotasks" and "microtasks" to help explain this conundrum. Macrotasks are large scale organizational tasks, the overall long-term structures and processes of an organization – these are the theoretical frameworks. Microtasks are the day-to-day work tasks that are enacted by leaders to make the macrotasks happen. Spillane asserts that to fully achieve the macrotasks of effective leadership, one must identify the short-term microtasks effective principals are utilizing to get there. Analyzing microtasks will help clarify how effective school administrators think and act, making their actions easier to replicate by other school leaders (Spillane, et al., 2001). This idea has led to a large body of research dedicated to analyzing and categorizing the traits and behaviors of effective principals.

Common Traits of Effective School Administrators

Trait-based leadership theory centers around the idea that leaders have certain innate qualities and characteristics (Northouse, 2010). As a result of this theory, studies have been conducted for the purpose of generating lists of leadership characteristics and

personality traits. Trait-based purists believe that these traits are inherent and cannot be learned. They also believe that situational context influences the effectiveness of the leader, so organizations must hire the leader with the traits that best fit their situation to increase organizational effectiveness (Northouse, 2010). Interestingly, Northouse included the concept of emotional intelligence (EI) in his chapter on trait-based leadership. However, the notion of EI as an inherent, unlearnable trait does not match the findings of renowned researchers in the field, such as Goleman (2000), who emphatically state that EI competencies can be learned and improved upon over time with proper training.

Like other successful leaders, effective school principals have been subject to numerous case studies, surveys and personality inventories in an effort to pinpoint a common set of traits shared by these leaders. Although each study shows a variety of dispositions, there are ten traits that repeatedly surface in a majority of educational leadership studies, with specific attributes associated with each of these traits (See Table 2.4).

In addition to these ten traits, other studies indicate that effective principals were also found to be inspirational and honest (Gurr et al., 2005), persistent and resilient (Leithwood et al., 2008), and energetic (Finklea, 1997). These traits were found to be common across all effective school principals, regardless of their leadership style or theoretical framework (Gurr et al., 2005).

Common Behaviors and Actions of Effective School Administrators

In addition to traits, researchers have also studied the behaviors and actions of effective school administrators in an attempt to answer the question, "What exactly do

Table 2.4. Ten common traits of successful school principals

Trait	Attributes
Effective communicators (Arnold, Perry Watson, Minatra & Schwartz, 2006; Buntrock, 2008; Finklea, 1997; Gurr, Drysdale, Swann, Doherty, Ford & Goode, 2005; Knab, 1998)	- Listens, speaks, reads and writes well - Communicates with action, not just words - Establishes methods for two-way communication - Demonstrates active listening skills
Optimistic (Gurr et al., 2005; Hausman, Crow & Sperry, 2000; Leithwood et al., 2008)	- Views barriers as a challenge, not an obstruction - Stays calm and sets a positive tone
Caring/Demonstrate concern for others (Arnold et al., 2006; Gordon & Patterson, 2006; Gurr et al., 2005; O'Donnell & White, 2005)	- Focuses on people and builds personal relationships - Engages in relationship-building behaviors daily
Trustworthy/Trusting of others (Gurr et al., 2005; Knab, 1998; O'Donnell & White, 2005)	- Encourages risk-taking in a safe environment - Exhibits confidentiality
Flexible/Open-Minded (Finklea, 1997; Leithwood et al., 2008)	- Willingness to learn from others - Ability to learn from mistakes and redirect
Committed/Strong work ethic (Finklea, 1997; Gurr et al., 2005)	- Works long hours alongside employees - Communicates importance of profession
Ethical/Strong value system (Arnold et al., 2006; Gurr et al., 2006; Knuth & Banks, 2006)	- Able to sort our conflicting values - Keeps welfare of student in mind - Displays honesty and integrity
Supportive/Values others (Buntrock, 2008; Gordon & Patterson, 2006; Gurr et al., 2005; Knab, 1998; Leithwood et al., 2008)	- Helps others balance professional and personal goals - Provides opportunities for professional growth
Efficacious/Self-confident (Finklea, 1997; Leithwood & Jantzi, 2008; Smith, Guarino, Strom, Reed, Lamkin & Rushforth, 2003)	- Believes in own ability to lead and make a differences - Reviews specific evidence and data to verify that a job is being done well
Passionate (Finklea, 1997; Gurr et al., 2005)	- Demonstrates dedication to profession - Displays unrelenting certainty that goals will be achieved

successful principals do?" We know that the ways in which effective principals perform their jobs is different from that of ineffective principals (Buntrock, 2008), so an analysis of actions could be helpful in improving the quality of aspiring school leaders. As with the traits, a wide variety of behaviors were noted throughout these studies, but nine common behaviors appear consistently throughout the literature.

Principals of successful schools overwhelmingly demonstrate these common behaviors:

1. **Distributes leadership**: Tasks are shared and advice and opinions are solicited to create a collaborative culture (Buntrock, 2008; Gurr et al., 2005; Hauser, 2001; Leithwood et al., 2008; Mitchell & Castle, 2005; Nettles & Herrington, 2007; Powell, 2004);
2. **Analyzes data:** Data is collected and used to systematically monitor student achievement and progress (Anderson & Pigford, 1987; Arnold et al., 2006; Finklea, 1997; Knab, 1998; Nettles & Herrington, 2007);
3. **Promotes professional development:** Leadership is actively involved in professional development by supporting and participating in activities and opportunities for collaborative planning (Bauck, 1987; Finklea, 1997; Leithwood et al., 2008; Nettles & Herrington, 2007; O'Donnell & White, 2005);
4. **Protects instructional time:** Procedures are developed and enforced to maximize time devoted to instruction (Hauser, 2001; Leithwood et al., 2008; O'Donnell & White, 2005);
5. **Continuously monitors:** Curriculum and instruction, the teaching and learning program, and teacher performance are monitored for effective implementation

(Arnold et al., 2006; Buntrock, 2008; Finklea, 1997; Leithwood et al., 2008; Nettles & Herrington, 2007)

6. **Involves the parents and the community:** Outside stakeholders are solicited and encouraged to become actively involved school activities and decision-making (Buntrock, 2008; Gurr et al., 2005; Leithwood et al., 2008; Nettles & Herrington, 2007; Powell, 2004);
7. **Maintains high visibility**: Leadership is easily accessible and is frequently present in hallways, classrooms, and school events (Finklea, 1997; O'Donnell & White, 2005);
8. **Models expectations:** Actions of the leader reflect the vision and current initiatives of the school (Condren, 2002; Mitchell & Castle, 2005);
9. **Rewards and provides feedback:** Incentives, rewards, feedback and praise are frequently used by the leadership (Mitchell & Castle, 2005; O'Donnell & White, 2005).

Although these practices provide insight into the behaviors of an effective principal, one must be careful before applying these practices haphazardly. These behaviors and actions are performed within a particular context based on a particular need. Effective school administrators know what, when, how and why to apply these behaviors and many principals are ineffective for no other reason than because they did not understand this contextual framework (Waters et al., 2003). As the old saying goes, "The right thing at the wrong time is the wrong thing."

National Initiatives for the Improvement of School Leaders

National organizations have collected and analyzed this research on the traits and behaviors of effective principals in an effort to guide school leadership improvement efforts. Two of the more prominent groups working to improve the quality of school leaders are the Council for Chief State School Officers (CCSSO) and the Southern Regional Education Board (SREB).

Seeking a way to measure and evaluate the effectiveness of school leaders, the Council for Chief State School Officers developed the Interstate School Leaders Licensure Consortium (ISLLC) Standards for School Leaders in 1998. In 2008, these standards were revised to reflect recent research in educational leadership and were adopted by the National Policy Board for Educational Administration (ISLLC, 2008). The development of these standards was a collaborative effort of numerous leading educational organizations such as the Association for Supervision and Curriculum Development (ASCD), the National Association for Elementary School Principals (NAESP), the National Association for Secondary School Principals (NASSP), the University Council for Education Administration (UCEA) and the Wallace Foundation.

ISLLC 2008 is organized by six high-priority standards broken down into 31 functions which help clarify and define each standard (see Figure 2.1). These standards and functions address current research recommendations for school leaders. The ISLLC 2008 standards provide a foundation for developing 21st century school leaders and are used by a vast majority of states for training, licensing and evaluating school leaders.

Standard 1	*Facilitating the development, articulation, implementation and stewardship of a vision of learning that is shared and supported by all stakeholders*	
	A.	Collaboratively develop and implement a shared vision and mission
	B.	Collect and use data to identify goals, assess organizational effectiveness, and promote organizational learning
	C.	Create and implement plans to achieve goals
	D.	Promote continuous and sustainable improvement
	E.	Monitor and evaluate progress and revise plans
Standard 2	*Advocating, nurturing and sustaining a school culture and instructional program conducive to student learning and staff professional growth*	
	A.	Nurture and sustain a culture of collaboration, trust, learning and high expectations
	B.	Create a comprehensive, rigorous and coherent curricular program
	C.	Create a personalized and motivating learning environment for students
	D.	Supervise instruction
	E.	Develop assessment and accountability systems to monitor student progress
	F.	Develop the instructional and leadership capacity of staff
	G.	Maximize time spent on quality instruction
	H.	Promote the use of the most effective and appropriate technologies to support teaching and learning
	I.	Monitor and evaluate the impact of the instructional program
Standard 3	*Ensuring management of the organization, operation and resources for a safe, efficient and effective learning environment*	
	A.	Monitor and evaluate the management and operational systems
	B.	Obtain, allocate, align and efficiently utilize human, fiscal and technological resources
	C.	Promote and protect the welfare and safety of students and staff
	D.	Develop the capacity for distributed leadership
	E.	Ensure teacher and organizational time is focused to support quality instruction and student learning

Figure 2.1. Educational leadership policy standards and functions: ISLLC 2008

Standard 4	*Collaborating with faculty and community members, responding to diverse community interests and needs, and mobilizing community resources*	
	A.	Collect and analyze data and information pertinent to the educational environment
	B.	Promote understanding, appreciation and use of the community's diverse cultural, social and intellectual resources
	C.	Build and sustain positive relationships with families and caregivers
	D.	Build and sustain productive relationships with community partners
Standard 5	*Acting with integrity, fairness and in an ethical manner*	
	A.	Ensure a system of accountability for every student's academic and social success
	B.	Model principles of self-awareness, reflective practice, transparency, and ethical behavior
	C.	Safeguard the values of democracy, equity and diversity
	D.	Consider and evaluate the potential moral and legal consequences of decision-making
	E.	Promote social justice and ensure that individual student needs inform all aspects of schooling
Standard 6	*Understanding, responding to, and influencing the political, social, economic, legal and cultural context*	
	A.	Advocate for children, families and caregivers
	B.	Act to influence local, district, state, and national decisions affecting student learning
	C.	Assess, analyze and anticipate emerging trends and initiatives in order to adapt leadership strategies

Figure 2.1. (Continued)

Source: Adapted from Interstate School Leaders Licensure Consortium. (2008). *ISLLC Educational Leadership Policy Standards: 2008.* Washington, D.C.: Council of Chief State School Officers.

The Southern Regional Education Board is another group leading national initiatives regarding school leadership. SREB is a non-profit organization of sixteen southern states focused on improving the quality of teaching, learning, and student achievement in this region. After an extensive analysis of literature reviews and data on school leadership, SREB identified thirteen critical success factors of principals documented to improve student achievement in schools with traditionally high-risk demographics (SREB, 2002). These thirteen factors are organized under three overarching competencies of effective school leaders (see Figure 2.2).

These success factors have been aligned with the ISLLC standards and provide additional insight into the behaviors of effective principals, especially those who work with high-risk populations. SREB has used these factors to design successful leadership preparation program modules to be used for training principal candidates and practitioners (SREB, n.d.).

Leadership in the Middle Grades

Middle grades schools are "those serving young adolescents in any structural combination of grades 5 through 9" (Petzko, 2005, p. 2). Principals of middle grades schools have an especially daunting task. These leaders serve a distinct population of young adolescents undergoing immense physical and physiological changes in growth, maturation, puberty, and brain development (Caskey & Anfara, 2007). This time period of rapid development is unmatched at any other age, resulting in occupational challenges for middle school educators that are unlike those faced by their elementary and high school counterparts. Middle school students have a unique set of characteristics and

A curriculum framework for leadership preparation and development that is based on the practices of principals who raise student achievement.

Through literature reviews and research data from its own school reform initiatives, SREB has identified 13 **Critical Success Factors (CSFs)** associated with principals who have succeeded in raising student achievement in schools with traditionally "high risk" demographics. These factors, organized under three overarching competencies, are the driving force for the work of SREB's Learning-centered Leadership Program.

Competency I: Effective principals have a comprehensive understanding of school and classroom practices that contribute to student achievement.

CSF 1. **Focusing on student achievement:** creating a focused mission to improve student achievement and a vision of the elements of school, curriculum and instructional practices that make higher achievement possible.

CSF 2. **Developing a culture of high expectations:** setting high expectations for all students to learn higher-level content.

CSF 3. **Designing a standards-based instructional system:** recognizing and encouraging good instructional practices that motivate students and increase their achievement.

Competency II: Effective principals have the ability to work with teachers and others to design and implement continuous student improvement.

CSF 4. **Creating a caring environment:** developing a school organization where faculty and staff understand that every student counts and where every student has the support of a caring adult.

CSF 5. **Implementing data-based improvement:** using data to initiate and continue improvement in school and classroom practices and in student achievement.

CSF 6. **Communicating:** keeping everyone informed and focused on student achievement.

CSF 7. **Involving parents:** making parents partners in students' education and creating a structure for parent and educator collaboration.

Competency III: Effective principals have the ability to provide the necessary support for staff to carry out sound school, curriculum and instructional practices.

CSF 8. **Initiating and managing change:** understanding the change process and using leadership and facilitation skills to manage it effectively.

CSF 9. **Providing professional development:** understanding how adults learn and advancing meaningful change through quality sustained professional development that leads to increased student achievement.

CSF 10. **Innovating:** using and organizing time and resources in innovative ways to meet the goals and objectives of school improvement.

CSF 11. **Maximizing resources:** acquiring and using resources wisely.

CSF 12. **Building external support:** obtaining support from the central office and from community and parent leaders for the school improvement agenda.

CSF 13. **Staying abreast of effective practices:** continuously learning from and seeking out colleagues who keep them abreast of new research and proven practices.

Figure 2.2. Southern Regional Education Board (SREB) critical success factors for principals

Source: Southern Regional Education Board. (2002). *SREB leadership initiative: Creating effective principals who can improve the region's schools and influence student achievement.* Atlanta, GA: Southern Regional Education Board. (p. 2)

educational needs, so it is essential for principals in middle grades schools to possess knowledge of middle level best practices if students are to be successful (Petzko, 2005).

Recent research on the status of our nation's middle schools highlights many problems. The majority of students enrolled in U. S. public schools in grades 5 through 8 are exhibiting substandard performance on national and state performance assessments (NMSA, 2004). Our nations' middle school students are falling woefully behind the majority of their international peers (Yecke, 2005). Yecke (2005) cites a telling statement from the Trends in International Math and Science Study (TIMSS): "Middle school is where the achievement of American children begins to plummet relative to that of children in other developed nations" (p. 1). Referring to TIMSS international comparisons from 4th to 8th grade in a policy brief for the U. S. Department of Education, Dr. William Schmidt states, "U. S. students don't start out behind. They fall behind" (Yecke, 2005, p. 14). Middle schools are criticized for not providing quality educational experiences for young adolescents (CCAD, 1989). This failure has been blamed on a focus on identity and character development at the expense of academic rigor (Yecke, 2005).

Despite the dismal overall picture of the performance of our nation's middle schools, there are middle schools that embody high achievement and success. Rigorous academics and a culture of high expectations are an integral part of the way these schools develop the character of the students they serve (Nelson et al., 2007). The National Forum to Accelerate Middle Grades Reform (NFAMGR) is devoted to improving the quality of education in our nation's middle schools (http://www.mgforum.org/). Among

their initiatives is the prestigious Middle Schools to Watch (MSTW) program, which recognizes successful middle schools across the nation to serve as models of excellence.

Although test scores should be an important factor in evaluating the overall achievement of a school, they should not be sole means of determining success. The literature on highly-effective middle schools identifies four areas that combine to create a successful middle school: academic excellence, developmental responsiveness, social equity, and organizational support (Williams-Boyd, 2005). Realizing that a successful school is about more than just test scores, NFAMGR maintains that successful middle schools which are named as MSTW must excel in each of these four areas, and they have developed 37 specific descriptive criteria to go along with these areas (See Appendix A). Schools that are named for this honor must complete a rigorous application process that includes an extensive written application, as well as a thorough site-visit and interviews with all stakeholders, including teachers, staff members, administrators, parents, students, and community members. Schools are rated on each of the 37 criteria across the four areas of excellence based on these multiple sources of data, and they must show that they are high-performing in all four areas in order to be named a MSTW.

Since 2002, 19 states have signed on to participate in the MSTW program, with more being added each year. 16 states are currently active in the program: Arkansas, California, Colorado, Georgia, Illinois, Indiana, Kentucky, Michigan, New Jersey, New York, North Carolina, Ohio, Pennsylvania, South Carolina, Utah and Virginia. Texas was added in 2010 and will begin naming schools in 2011. At the time this study was conducted, there were 224 schools across these states currently recognized as MSTW, with 90 of these exemplary middle schools being named in 2010

(http://www.mgforum.org/). Once a school is named they maintain the designation for three years, after which time they must reapply.

As with any great school or organization, the leadership is critical to success. "No single individual is more important to initiating and sustaining improvement in middle grades school students' performance than the school principal" (Jackson & Davis, 2000, p. 157). McEwin & Greene (2010) studied nationally recognized highly successful middle schools, including MSTW in their group of highly successful schools. The results of this study suggest that leadership is a key factor in the success of these schools.

So what makes an effective middle grades principal? Not surprisingly, successful middle level principals share many of the same behaviors as principals of elementary and high schools (Bauck, 1987). They promote a culture of collaborative, distributive leadership (Knab, 2009; Brown & Anfara, 2003; Petzko, 2005); they praise and recognize staff (Knab, 2009); they encourage and strengthen parent and community relationships (Petzko, 2005); and they ensure that staff members continually grow and develop their professional abilities (Knab, 2009). Middle school principals also exhibit many of the same traits mentioned earlier, such as being effective communicators (Petzko, 2005), being trustworthy (Brown & Anfara, 2003), and being focused on relationship-building (Petzko, 2004; Knab, 2009).

The research has provided us with more insight into the middle grades principal.

- Brown & Anfara (2003) found that effective middle school principals have a clear sense of direction, and can articulate and translate that direction into a few specific goals and objectives for staff to follow. They are visionary, but also understand how to turn that vision into action. They know the nature, needs,

strengths and limitations of staff and how to move them to achieve the vision. This study also found that effective middle grades leaders focused on the substance of programs, not just on the establishment of programs.

- Petzco (2005) conducted a study that asked middle school principals to identify the most important qualities for a person in their position. In addition to some of the traits listed above, they also identified knowledge of staff supervision and evaluation, instructional leadership capacity, and the ability to be a change agent.
- Petzko et al. (2002) state that middle school principals are wholeheartedly committed to the school's vision, and that they maintain an environment conducive to continuous improvement.
- Knab (2009) studied the school leader's role in relationship building. They found that effective middle school principals not only build relationships between themselves and the staff members, but also intentionally focus on building teacher-teacher and teacher-student relationships.

These studies show that there is not much difference in the traits and behaviors of effective school leaders, regardless of grade level. However, many of the current research studies on middle grades principals were conducted on practicing middle school principals, not necessarily on effective middle school principals. This means that we now have information about what middle school principals do in general practice, but we still do not necessarily know if that is the same or different from what effective middle school leaders do. Although there have been quite a few studies conducted on the characteristics of successful middle schools, studies that are specific to successful middle school leaders are sparse. In order to hone in on characteristics that are specific to successful middle

grades principals, more studies that focus specifically on this group of leaders will need to be conducted before any distinctions can be made.

Conclusion

Past research on educational leadership has led to an overabundance of theories, traits and behaviors. Principals struggle to replicate these in a quest to become more effective, switching from one to another as the latest fad predominates. These theories can appear on the surface to be mutually exclusive, even contradictory in some cases, resulting in confusion among school practitioners as to which theory, if any, to follow. In addition, much of the research on effective school leadership has centered on elementary or high school principals, with fewer studies available specific to the middle school principalship. Since the performance of middle school students in the United States has fallen far behind their international peers, this is an area of education that needs attention.

One current theory, supported by developing research, is that school leaders who are emotionally intelligent will have a greater impact on the overall performance of their school. There is a need for further research in the area of emotional intelligence specific to school leaders, including the development and impact of training programs to improve emotional competence and performance. The emergence of emotional intelligence as a framework for successful school administrators, including those at the middle school level, is one more link in the study of effective school leaders.

CHAPTER 3

METHODOLOGY

Introduction

Although it has already been established that emotionally intelligent leaders have a positive impact on the performance of their organization (Cherniss, 2002), research on the emotional intelligence specific to leaders of high-achieving middle schools is still evolving. The purpose of this study is to add to the literature through an exploration of the emotional intelligence (EI) scores of principals of high-achieving middle schools and to determine whether these principals score higher in certain emotional intelligence competencies. Since the notion of successful school leadership is heavily grounded in the outcome of high levels of student achievement, this study may add evidence regarding the relationship between the emotional intelligence of principals and student achievement. If certain EI competencies are deemed to be more prevalent among these principals, it could have potential implications for the recruitment and screening of middle school principal candidates, as well as for principal preparation programs and job-embedded professional development training.

This chapter presents the research design and methodology of this study, an overview of the population and sampling procedures, a description of the instrumentation, and the methods for data collection and analysis.

This research is a quantitative study, employing descriptive and inferential statistics, analysis of variance, and correlational research designs. The independent variables include the demographic variables of principal gender, school socioeconomic

status, and school's location in a rural vs. non-rural area. The dependent variable is the emotional intelligence scores of these principals as measured by the Emotional Competence Inventory 2.0 (ECI 2.0).

Research Questions

Answers to the following research questions will add to the current body of research and literature regarding the prevalence and possible impact on the organization of emotional intelligence competencies among successful school leaders.

1. What is the emotional intelligence of national Middle Schools to Watch principals, as measured by the Emotional Competence Inventory (ECI 2.0)?
2. Do the national Middle School to Watch principals score higher in certain emotional intelligence competencies, as evidenced by differences between the overall mean competency scores on the Emotional Competence Inventory (ECI 2.0)?
3. Are there differences in the emotional intelligence competencies of male and female national Schools to Watch principals?
4. Are there differences in the emotional intelligence competencies of national Schools to Watch principals in rural and non-rural locations?
5. What is the relationship between the socioeconomic status of the school, measured by percentage of students receiving free or reduced lunch, and the emotional intelligence competencies of national Middle Schools Watch principals?

6. What is the relationship between the minority enrollment of the school, measured by percentage of non-Caucasian students, and the emotional intelligence competencies of national Middle Schools Watch principals?

Participants

At the time this study was conducted, there were 224 schools designated as a MSTW from sixteen states across the nation. Participants in this study were a sample of these middle school principals serving in schools that were designated as a Middle School to Watch. The participants selected for the study were the principals of the schools at the time of designation as a MSTW and served in the role as principal for at least two years. This helped to ensure that the MSTW designation could be attributed, at least in part, to the leadership capabilities of this principal. There were 154 principals across the 16 active states who met these requirements and were eligible to participate at the time the study was conducted. However, only 49 principals responded and gave consent to participate; 34 (n = 34) of these actually completed the requirements of the study, for a 22% total response rate. 14 of the 16 active Schools to Watch states were represented in this study; Michigan and South Carolina were the only active states without representation.

Participants were not randomly chosen due to the number of principals already excluded from the sample due to length of service constraints. Each principal who responded and who met the above described criteria was part of the sample in order to keep the sampling frame large enough to gather enough data to be significant. The

research sample contained a mixed representation of gender, age, years of experience, level of education, and school demographics.

Participants received an informed consent form, which detailed their rights in participating in the study, including their right to terminate their involvement in the study at any time (see Appendix B).

Instrumentation

This study assessed the overall emotional intelligence, including EI cluster and competency scores, of MSTW principals. For the variable of emotional intelligence, permission was obtained from the Hay group to use version 2.0 of the Emotional Competence Inventory (ECI 2.0) as the measurement tool for this research, which is based on the EI model developed by Rutgers University professor Daniel Goleman. Goleman (1998) identifies four broad categories of emotional intelligence, broken down into eighteen different competencies (see Table 2.1). This tool was selected over other EI measures because it is a 360º instrument, and because it is based on the work of Goleman who specifically focuses on the impact of emotional intelligence on job performance and workplace leadership. The instrument is both reliable and valid, with internal reliabilities for each of the eighteen competencies ranging from .68 to .87 using Chronbach's Alpha, and an overall average reliability of .78. The instrument has a high level of predictive validity toward workplace performance (Hay Group, 2005).

The ECI 2.0 consists of a total of 72 questions, with four questions aligned to each of the eighteen competencies. The instrument uses a 5-point Likert-type scale, with an additional "Don't Know" option, with the following choices for each question:

1. Never
2. Rarely
3. Sometimes
4. Often
5. Consistently

Procedures for Data Collection and Analysis

The variable of "successful school leader" is difficult to define. The literature does not provide definitive criteria or a clear definition of success for schools or school leaders. In most studies, success of the leader is usually traced back to high test scores, and throughout these studies different test scores are used, making it difficult to compare results (Buntrock, 2008; Hauser, 2001; Nettles & Harrington, 2007; Ylimaki, 2007); in other studies, success of the leader is defined through broader terms which are difficult to measure, such as exhibiting certain traits and the ability to impact the school's culture and climate (Crow, 2007; Smith, et al., 2003). For the purposes of this study, the researcher chose to use the designation as a MSTW as the measure of leadership success for several reasons. First, the schools must meet a wide range of criteria, which includes test scores but goes well beyond that narrow measure. Second, the schools are evaluated by organizations that specialize in research on middle schools and adolescents. Last, these schools have been identified to serve as models of excellence for other middle schools across their respective states and the nation.

The researcher worked with the statewide program directors of the MSTW organizations to identify the principals of currently designated MSTW in each state and

to gain their support in encouraging participation in the study. An initial request for participation was sent by email to the state directors outlining the purposes and commitments for participation in the study, the survey link and the informed consent form. The state directors were asked to provide this information to the MSTW principals in their state and to encourage their participation. One week later, the researcher emailed the principals directly inviting them to participate in the research study. Two weeks later, the researcher sent out one final email invitation directly to principals who had not yet committed to participate.

Each principal who agreed to participate was asked to forward a survey link to a minimum of four people to complete the ECI 2.0 survey on his or her behalf. The survey respondents represented personal acquaintances, as well as professional colleagues including supervisors, direct reports and peers.

The response surveys were completed through SurveyMonkey.com, which is a secure on-line internet site. Response forms were coded to ensure confidentiality, and all respondents were informed of their anonymity. The survey site was open for 6 weeks during February and March of 2011, and closed on April 1, 2011.

The researcher collected the electronic data and transcribed it into SPSS for statistical analysis. Basic demographic data about each school was collected through the Schools to Watch website, 2009 – 2010 School Report Cards posted on the states' department of education website, and finally through follow-up questions to each principal participant as part of the survey.

Question 1: What is the emotional intelligence of national Middle Schools to Watch principals, as measured by the Emotional Competence Inventory (ECI 2.0)?

Each principal's survey scores were compiled on a spreadsheet, and the researcher averaged the overall item scores for each EI competency and calculated the descriptive statistics. Each competency score was then compared to a table provided by the Hay Group of high, medium or low ability in each competency area (see Table 3.1).

Table 3.1. Average-item scores equivalent to high, medium, and low competency levels

ECI 2.0 Cluster	Competency	Low Range	Medium Range	High Range
Self-Awareness	Emotional Self-Awareness	< 3.10	3.10 to 3.54	> 3.54
	Accurate Self-Assessment	< 3.60	3.60 to 3.92	> 3.92
	Self-Confidence	< 4.20	4.20 to 4.45	> 4.45
Self-Management	Emotional Self-Control	< 3.78	3.78 to 4.07	> 4.07
	Transparency	< 3.50	3.50 to 3.84	> 3.84
	Adaptability	< 3.72	3.72 to 3.98	> 3.98
	Achievement	< 3.75	3.75 to 4.04	> 4.04
	Initiative	< 3.30	3.30 to 3.60	> 3.60
	Optimism	< 3.98	3.98 to 4.25	> 4.25
Social Awareness	Empathy	< 3.92	3.92 to 4.21	> 4.21
	Organizational Awareness	< 3.68	3.68 to 4.02	> 4.02
	Service Orientation	< 4.06	4.06 to 4.38	> 4.38
Relationship Management	Developing Others	< 3.66	3.66 to 4.03	> 4.03
	Inspirational Leadership	< 3.71	3.71 to 4.08	> 4.08
	Change Catalyst	< 3.63	3.63 to 3.93	> 3.93
	Influence	< 3.55	3.55 to 3.88	> 3.88
	Conflict Management	< 2.95	2.95 to 3.26	> 3.26
	Teamwork & Collaboration	< 3.98	3.98 to 4.25	> 4.25

Source: Hay Group. (2005, November). *Emotional Competence Inventory (ECI) technical manual*. Boston: Steven B. Wolff. (p. 7)

Once the competency levels were determined, the principal was then identified as either emotionally intelligent or not emotionally intelligent. To be considered emotionally intelligent, a principal must have a high level ranking in six or more competencies, with at least one high ranking in each of the four clusters (Goleman, 1998*b*).

Next, the mean scores for the entire group of principals for each competency were calculated. Two-tailed one-sample t-tests were conducted to determine if there were significant differences between the overall mean EI competency scores of the participants and the overall mean EI competency scores of the norm Administration job-function group provided the Hay Group (2005) (see Table 3.2).

Table 3.2 Norms for administration based on total others' ratings with average-item data

ECI 2.0 Cluster	**Competency**	**Administration Norms (n = 1755)**	
		M	SD
Self-Awareness	Emotional Self-Awareness	3.20	.69
	Accurate Self Assessment	3.68	.51
	Self-Confidence	4.24	.42
Self-Management	Emotional Self-Control	3.85	.47
	Transparency	3.59	.51
	Adaptability	3.76	.45
	Achievement Orientation	3.79	.53
	Initiative	3.30	.48
	Optimism	4.05	.46
Social Awareness	Empathy	4.02	.44
	Organizational Awareness	3.72	.56
	Service Orientation	4.04	.52
Relationship Management	Developing Others	3.74	.59
	Inspirational Leadership	3.78	.61
	Change Catalyst	3.65	.52
	Influence	3.58	.56
	Conflict Management	2.92	.49
	Teamwork & Collaboration	4.00	.42

Source: Adapted from Hay Group. (2005, November). *Emotional Competence Inventory (ECI) technical manual*. Boston: Steven B. Wolff. (p. 47)

Question 2: Do the national Middle School to Watch principals score higher in certain emotional intelligence competencies, as evidenced by differences between the overall mean competency scores on the Emotional Competence Inventory (ECI 2.0)?

The specific areas of emotional competence for each participant were noted and analyzed to determine if the principals scored higher as a group on certain EI competencies. SPSS was used to complete a within-subjects analysis of variance (ANOVA) in order to determine if there were significant differences between the overall mean EI cluster scores and the overall mean EI competency scores within each cluster of the participating principals.

Since post-hoc tests are only used on between-subjects designs, they could not be utilized on this data set. If the F value was significant, indicating that there were differences among the means of the 18 competencies, these differences were further investigated through rank ordering the overall mean scores for each of the eighteen EI competencies to determine the highest and lowest-scoring competencies for this group of principals. Paired samples t-tests were run to determine if the means of the higher-scoring competencies were significantly different from the means of the lower-scoring competencies.

Question 3: Are there differences in the emotional intelligence competencies of male and female national Schools to Watch principals?

Gender data on each participant was collected. For each of the eighteen competencies, two-tailed independent samples t-tests were utilized to compare the mean

scores of males to females to determine if there were significant differences in gender performance on any of the competencies.

Question 4: Are there differences in the emotional intelligence competencies of national Schools to Watch principals in rural and non-rural locations?

Schools were classified into rural or non-rural status based on information provided on the national Schools to Watch website. Non-rural schools included those that were listed as either urban or suburban. For each of the eighteen competencies, two-tailed independent samples t-test were utilized to compare the mean scores of principals with schools located in rural versus non-rural areas to determine if there were significant differences between the two groups on any of the competencies.

Question 5: What is the relationship between the socioeconomic status of the school, measured by percentage of students receiving free or reduced lunch, and the emotional intelligence competencies of national Middle Schools Watch principals?

Socioecomic status data for each school was collected in the form of percentage of students eligible for free or reduced lunch. For each of the eighteen competencies, a Pearson Product Correlation was utilized to determine if there were any significant relationships between the principals' EI competencies and a school's socioeconomic makeup.

Question 6: What is the relationship between the minority enrollment of the school, as measured by percentage of non-Caucasian students, and the emotional intelligence competencies of national Middle Schools Watch principals?

Racial makeup data for each school was collected in the form of percentage of non-Caucasian students enrolled. For each of the eighteen competencies, a Pearson Product Correlation Coefficient was utilized to determine if there were any significant relationships between the principals' EI competencies and a school's minority enrollment.

CHAPTER 4

RESULTS OF THE RESEARCH

Introduction

This chapter presents the results of data collected during the early spring of 2011. Principals of national Middle Schools to Watch (n = 34) from 14 states participated in the study by identifying personal and professional acquaintances to respond to a survey. Demographic data were collected from the national Middle Schools to Watch website, 2009-2010 School Report Cards available on state department of education websites, and from the participants.

This study investigates the emotional intelligence competencies of principals of nationally-recognized Middle Schools to Watch (MSTW). The following six research questions guided the study:

1. What is the emotional intelligence of national Middle Schools to Watch principals, as measured by the Emotional Competence Inventory (ECI 2.0)?
2. Do the national Middle School to Watch principals score higher in certain emotional intelligence competencies, as evidenced by differences between the overall mean competency scores on the Emotional Competence Inventory (ECI 2.0)?
3. Are there differences in the emotional intelligence competencies of male and female national Schools to Watch principals?
4. Are there differences in the emotional intelligence competencies of national Schools to Watch principals in rural and non-rural locations?

5. What is the relationship between the socioeconomic status of the school, measured by percentage of students receiving free or reduced lunch, and the emotional intelligence competencies of national Middle Schools to Watch principals?
6. What is the relationship between the minority enrollment of the school, measured by percentage of non-Caucasian students, and the emotional intelligence competencies of national Middle Schools to Watch principals?

Overview of Participants

Participants responded to an online survey between February 20, 2011, and March 30, 2011. To qualify for participation, the participants must have been the principal of the school at the time of a designation as a MSTW and have served as principal of the school for at least two years. The population included 154 MSTW principals from 16 states who met the qualifying criteria. Out of this qualifying group, there were 49 principals who provided consent to participate, but valid data was only collected from 34 of these participants, for a 22% total response rate. These 34 principals represented 14 of the 16 active Schools to Watch states (see Table 4.1).

Participants forwarded a survey link to personal acquaintances, peers, supervisors, and employees under their direct supervision; these respondents were then asked to complete a 72-item survey about that principal's emotional intelligence. The number of valid survey respondents for each participant ranged from three to 41, and the average number of respondents for each participant was eight.

Table 4.1. Participation rate by state

Active MSTW States	**Total Number in State Qualified to Participate**	**Number of Actual Participants with Valid Survey Data**	**Percentage of Overall Sample Population by State**
Arkansas	N = 4	n = 1	2.9%
California	N = 21	n = 3	8.8%
Colorado	N = 3	n = 1	2.9%
Georgia	N = 8	n = 1	2.9%
Illinois	N = 15	n = 4	11.8%
Indiana	N = 3	n = 1	2.9%
Kentucky	N = 15	n = 8	23.5%
Michigan	N = 3	n = 0	0.0%
North Carolina	N = 14	n = 2	5.9%
New Jersey	N = 8	n = 4	11.8%
New York	N = 13	n = 1	2.9%
Ohio	N = 13	n = 2	5.9%
Pennsylvania	N = 10	n = 3	8.8%
South Carolina	N = 4	n = 0	0.0%
Utah	N = 5	n = 1	2.9%
Virginia	N = 15	n = 2	5.9%

The 34 participants represented a wide variety of personal and school demographics.

- *Gender* -- There were 22 female principals and 12 male principals who participated in the study.
- *Location* -- Of the 34 schools represented, 12 of those were located in rural areas. The other 22 were located in non-rural areas described as either urban or suburban.
- *School Grade Level Configuration* – 22 of the participating schools had a traditional middle school configuration, enrolling students in grades 6, 7 and 8. Four of the schools housed Kindergarten through 8th grade students. Four schools were a junior-high model, housing 7th and 8th grade students. One school contained grades 6 and 7, one school had grades 5 and 6, one school had grades 5 through 8, and one school had grades 7 through 9.
- *Enrollment* – Middle schools, or middle grades schools, are "those serving young adolescents in any structural combination of grades 5 through 9" (Petzko, 2005, p. 2). Enrollment counts for each school were based on students enrolled in grades 5 through 9. Enrollment size ranged from 140 up to 1576, with a mean enrollment of 692.
- *Socioeconomic Status* – The socioeconomic status of each school was determined by the percentage of students eligible for free or reduced lunch services. These percentages ranged from 4% to 96%, with a mean of 40%.
- *Minority Enrollment* – The minority enrollment of each school was determined by the percentage of non-Caucasian students enrolled in the middle grades. These percentages ranged from 1% to 95% minority population, with a mean of 26%.

Analysis of Data

Question 1: What is the emotional intelligence of national Middle Schools to Watch principals, as measured by the Emotional Competence Inventory (ECI 2.0)?

Average item scores for each participant for each of the 18 emotional intelligence competencies were calculated. As described in Chapter 3, each competency score was then compared to a table provided by the Hay Group of high, medium or low ability in each competency area (see Table 3.1). Appendix C shows the competency results for each participant.

Once the competency levels had been determined, the principal was identified as either emotionally intelligent or not emotionally intelligent. To be considered emotionally intelligent, a principal must have a high ranking in six or more competencies, with at least one high ranking in each of the four clusters (Goleman, 1998*b*). The vast majority of participants (88.2%; n = 30) met the criteria to be considered emotionally intelligent. Table 4.2 shows the overall emotional intelligence by participant.

Table 4.3 shows a breakdown of the number and percentage of participants scoring low, medium and high in each competency. None of the participants scored in the low range on the competencies of emotional self-awareness, achievement orientation, optimism, developing others, influence, or inspirational leadership. 100% of the participants scored in the high range for the emotional self-awareness competency. This was the only competency for which all of the participants scored in the high range. Emotional self-control had the highest frequency of low range scores, with six participants scoring in the low range for this competency.

Table 4.2. Overall emotional intelligence by participant

Participant	Total # of High Level EI Competency Scores	# of EI Clusters Containing High Level Scores	Emotionally Intelligent?
1	18	4	**Yes**
2	10	4	**Yes**
3	18	4	**Yes**
4	8	3	*No*
5	18	4	**Yes**
6	9	4	**Yes**
7	16	4	**Yes**
8	18	4	**Yes**
9	17	4	**Yes**
10	9	4	**Yes**
11	17	4	**Yes**
12	17	4	**Yes**
13	17	4	**Yes**
14	14	4	**Yes**
15	18	4	**Yes**
16	16	4	**Yes**
17	17	4	**Yes**
18	17	4	**Yes**
19	18	4	**Yes**
20	13	4	**Yes**
21	17	4	**Yes**
22	12	4	**Yes**
23	18	4	**Yes**
24	4	3	*No*
25	6	3	*No*
26	11	4	**Yes**
27	18	4	**Yes**
28	17	4	**Yes**
29	11	4	**Yes**
30	17	4	**Yes**
31	18	4	**Yes**
32	6	3	*No*
33	17	4	**Yes**
34	12	4	**Yes**

Table 4.3. Number and percentage of participants scoring in each competency range

Cluster	Competency	Low Range		Medium Range		High Range	
		n	**%**	***n***	**%**	***n***	**%**
Self-Awareness	Accurate Self-Assessment	2	6%	5	15%	27	79%
	Emotional Self-Awareness	0	0%	0	0%	34	100%
	Self-Confidence	1	3%	9	26%	24	71%
Self-Management	Achievement Orientation	0	0%	3	9%	31	91%
	Adaptability	1	3%	3	9%	30	88%
	Emotional Self-Control	6	18%	7	21%	21	62%
	Initiative	1	3%	2	6%	31	91%
	Optimism	0	0%	4	12%	30	88%
	Transparency	1	3%	6	18%	27	79%
Social Awareness	Empathy	4	12%	7	21%	23	68%
	Organizational Awareness	1	3%	5	15%	28	82%
	Service Orientation	3	9%	11	32%	20	59%
Relationship Management	Change Catalyst	1	3%	3	9%	30	88%
	Conflict Management	4	12%	6	18%	24	71%
	Developing Others	0	0%	9	26%	25	74%
	Influence	0	0%	2	6%	32	94%
	Inspirational Leadership	0	0%	9	26%	25	74%
	Teamwork and Collaboration	1	3%	8	24%	25	74%

Finally, the overall results for all 34 participants were combined to get a holistic picture of the emotional intelligence of the group. Table 4.4 shows the mean scores and standard deviations for this group of principals for all 18 competencies. Scores for each competency could range from 1 (never demonstrates this competency) to 5 (consistently demonstrates this competency). The mean scores for the group were in the high range for all 18 competencies (see Table 3.1), and the standard deviations for each competency were small, indicating consistency of results and a common pattern of responses across all participants.

The Hay Group (2005) provides normative average-item data for each of the EI competencies by a variety of job functions for comparison purposes. The job-function norms most closely related to principals is that of Administration (see Table 3.2). One-sample t-tests were conducted to determine if there are significant differences between the EI competency means for this group of MSTW principals and the competency means for the normative group of Administrators listed in Table 3.2. Results reveal this group of MSTW principals scored significantly higher in every single one of the 18 competencies than the norm group of administrators (see Table 4.5). This finding is consistent with the results of other studies, which indicate that higher levels of workplace achievement and productivity are linked to high levels of emotional intelligence (Cherniss, 2002).

Table 4.4. Means and standard deviations of the 18 emotional intelligence competencies for national Middle Schools to Watch principals

		Accurate Self-Assessment	Emotional Self-Awareness	Self Confidence	Achievement Orientation	Adaptability	Emotional Self-Control	Initiative	Optimism	Transparency
N	Valid	34	34	34	34	34	34	34	34	34
	Missing	0	0	0	0	0	0	0	0	0
Mean		4.2341	4.2706	4.5738	4.4579	4.3465	4.1488	3.9932	4.5959	4.1806
Std. Deviation		.36343	.32686	.24151	.27578	.27384	.42058	.28286	.23505	.30491
Competency Level		High	High	High	High	High	High	High	High	High

		Empathy	Organizational Awareness	Service Orientation	Change Catalyst	Conflict Management	Developing Others	Influence	Inspirational Leadership	Teamwork and Collaboration
N	Valid	34	34	34	34	34	34	34	34	34
	Missing	0	0	0	0	0	0	0	0	0
Mean		4.3468	4.3012	4.4585	4.1971	3.4226	4.3344	4.2891	4.3756	4.4097
Std. Deviation		.32237	.33431	.24602	.26290	.35322	.33545	.27330	.33760	.28694
Competency Level		High	High	High	High	High	High	High	High	High

Table 4.5. One sample t-test with norms for administration

	One Sample Test							
	t-test for Equality of Means							
	Test Value	Mean	*t*	*df*	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
							Lower	Upper
Accurate Self-Assessment	3.68	4.23	8.890	33	.000	.554	.427	.681
Emotional Self-Awareness	3.20	4.27	19.099	33	.000	1.071	.957	1.185
Self-Confidence	4.24	4.57	8.060	33	.000	.334	.250	.418
Achievement Orientation	3.79	4.46	14.123	33	.000	.668	.572	.764
Adaptability	3.76	4.35	12.488	33	.000	.586	.491	.682
Emotional Self-Control	3.85	4.15	4.143	33	.000	.299	.152	.446
Initiative	3.30	3.99	14.290	33	.000	.693	.595	.792
Optimism	4.05	4.60	13.542	33	.000	.546	.464	.628
Transparency	3.59	4.18	11.294	33	.000	.591	.484	.697
Empathy	4.02	4.35	5.910	33	.000	.327	.214	.439
Organizational Awareness	3.72	4.30	10.137	33	.000	.581	.465	.698
Service Orientation	4.04	4.46	9.919	33	.000	.419	.333	.504
Change Catalyst	3.65	4.20	12.133	33	.000	.547	.455	.639
Conflict Management	2.92	3.42	8.298	33	.000	.503	.379	.626
Developing Others	3.74	4.33	10.332	33	.000	.594	.477	.712
Influence	3.58	4.29	15.129	33	.000	.709	.614	.805
Inspirational Leadership	3.78	4.38	10.287	33	.000	.596	.478	.713
Teamwork & Collaboration	4.00	4.41	8.326	33	.000	.410	.310	.510

Question 2: Do the national Middle School to Watch principals score higher in certain emotional intelligence competencies, as evidenced by differences between the overall mean competency scores on the Emotional Competence Inventory (ECI 2.0)?

A one-way within-subjects ANOVA was conducted to determine if there were significant differences in the overall mean competency scores for the group of MSTW principals (see Table 4.6).

Table 4.6. ANOVA table of within-subjects effects

Source		**SS**	***df***	**MS**	***F***	***p***	η^2
Within Subjects	Sphericity Assumed	38.8	17	2.3	48.65	0.00	.60
Error(within)	Sphericity Assumed	26.3	561	.05			

The results of the ANOVA indicate significant differences among the 18 emotional intelligence competencies for this group of MSTW principals ($F = 48.65$, $df_w = 17$, $p = 0.00$, $\eta^2 = .60$).

This population does not lend itself to a between-groups comparison, therefore post-hoc tests cannot be run. The purpose of this research question is to find commonalities within this group of MSTW principals. Since the ANOVA indicated significant differences among the competencies, these differences were further investigated through rank ordering the overall mean scores for each of the eighteen EI competencies to identify the competencies with the highest means (see Table 4.7).

Table 4.7. Overall mean competency scores and standard deviations of MSTW principals ranked from highest to lowest means

Rank	Competency	Cluster	Mean	Std. Deviation
1	Optimism	Self-Management	4.5959	0.24
2	Self-Confidence	Self-Awareness	4.5738	0.24
3	Service Orientation	Social Awareness	4.4585	0.25
4	Achievement Orientation	Self-Management	4.4579	0.28
5	Teamwork & Collaboration	Relationship Management	4.4097	0.29
6	Inspirational Leadership	Relationship Management	4.3756	0.34
7	Empathy	Social Awareness	4.3468	0.32
8	Adaptability	Self-Management	4.3465	0.27
9	Developing Others	Relationship Management	4.3344	0.34
10	Organizational Awareness	Social Awareness	4.3012	0.33
11	Influence	Relationship Management	4.2891	0.27
12	Emotional Self-Awareness	Self-Awareness	4.2706	0.33
13	Accurate Self-Assessment	Self-Awareness	4.2341	0.36
14	Change Catalyst	Relationship Management	4.1971	0.26
15	Transparency	Self-Management	4.1806	0.30
16	Emotional Self-Control	Self-Management	4.1488	0.42
17	Initiative	Self-Management	3.9932	0.28
18	Conflict Management	Relationship Management	3.4226	0.35

Scores for each competency could range from 1 (never demonstrates this competency) to 5 (consistently demonstrates this competency). Based on overall mean scores, the top six competencies were identified for this group of principals, since it takes six or more high level competencies in order to be emotionally intelligent. The six competencies with the highest mean scores in order from first to sixth were:

1. optimism,
2. self-confidence,
3. service orientation,
4. achievement orientation,

5. teamwork & collaboration, and
6. inspirational leadership.

Interestingly, the top six scores adhered to the criteria of what it means to be identified as emotionally intelligent because they were spread out across all four EI clusters.

The ANOVA did indicate significant differences, but since a post-hoc test could not be run, some t-tests are necessary. It would not be feasible to run all 153 t-tests to make comparisons between every single competency, so paired-samples t-tests were calculated for a few selected competencies in an effort to determine cut points in significance between the competency means. Beginning with Conflict Management, which was the competency score with the lowest mean, the results of the t-test indicated significant differences between this competency and each of the 17 other EI competencies (see Table 4.8). The mean for Conflict Management was significantly lower than any of the other competency means for this group of MSTW principals. However, it is important to note that despite these significant differences, the overall mean score for Conflict Management of 3.42 is still considered in the high ability range according to the Hay Group (2005).

Table 4.8. Paired-samples t-test for conflict management competency

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower	Upper			
Pair 1	Conflict Management – Accurate Self Assessment	-.811	.537	.092	-.999	-.624	-8.809	33	.000
Pair 2	Conflict Management – Emotional Self Awareness	-.848	.439	.075	-1.001	-.695	-11.250	33	.000
Pair 3	Conflict Management – Self Confidence	-1.151	.401	.069	-1.291	-1.011	-16.730	33	.000
Pair 4	Conflict Management – Achievement Orientation	-1.035	.340	.058	-1.154	-.917	-17.754	33	.000
Pair 5	Conflict Management - Adaptability	-.924	.418	.072	-1.070	-.778	-12.877	33	.000
Pair 6	Conflict Management – Emotional Self Control	-.726	.606	.104	-.938	-.515	-6.987	33	.000
Pair 7	Conflict Management - Initiative	-.571	.356	.061	-.695	-.446	-9.335	33	.000
Pair 8	Conflict Management - Optimism	-1.173	.368	.063	-1.301	-1.045	-18.613	33	.000
Pair 9	Conflict Management - Transparency	-.758	.424	.073	-.906	-.610	-10.427	33	.000

Table 4.8 (Continued)

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower	Upper			
Pair 10	Conflict Management - Empathy	-.924	.488	.084	-1.094	-.754	-11.053	33	.000
Pair 11	Conflict Management – Organizational Awareness	-.879	.430	.074	-1.028	-.729	-11.919	33	.000
Pair 12	Conflict Management – Service Orientation	-1.036	.415	.071	-1.181	-.891	-14.544	33	.000
Pair 13	Conflict Management – Change Catalyst	-.774	.346	.059	-.895	-.653	-13.055	33	.000
Pair 14	Conflict Management – Developing Others	-.912	.490	.084	-1.083	-.741	-10.855	33	.000
Pair 15	Conflict Management - Influence	-.866	.397	.068	-1.005	-.728	-12.735	33	.000
Pair 16	Conflict Management – Inspirational Leadership	-.953	.434	.075	-1.105	-.801	-12.790	33	.000
Pair 17	Conflict Management – Teamwork Collaboration	-.987	.433	.074	-1.138	-.836	-13.286	33	.000

To determine if there are other significant differences, the process is repeated with the second lowest scoring competency, which is Initiative (see Table 4.9). The results of the paired-samples t-test indicate significant differences between Initiative and all other competencies, with the exception of Emotional Self-Control, $t(33) = -1.88$, $p > .05$ (two-tailed). There was no significant difference between the mean competency score of Initiative and that of Emotional Self-Control.

To determine additional significant differences, the process is once again repeated with the third lowest scoring competency, which is Emotional Self-Control (see Table 4.10). The results of the paired-samples t-test indicate significant differences between Emotional Self-Control and 12 of the 17 other competencies. No significant difference with Initiative was determined in the previous t-tests; the other four competencies for which there were no significant differences were: Accurate Self Assessment, $t(33) = -1.53$, $p > .05$ (two-tailed); Transparency, $t(33) = -.48$, $p > .05$ (two-tailed); Change Catalyst, $t(33) = -.621$, $p > .05$ (two-tailed); and Influence, $t(33) = -1.97$, $p > .05$ (two-tailed).

At this point, since close to one-third of the differences are no longer significant, further t-tests are not necessary. The purpose of this question was to determine if the list of 18 EI competencies could be narrowed down to a handful of significantly different competencies which could then be targeted for training and development of middle school principals. It appears that only the mean competency scores of Conflict Management and Initiative are significantly different from the rest, and although a small number of other significant differences might be found here and there, the mean scores of the remaining competencies are clustered so tightly together that further tests would not

Table 4.9. Paired samples t-tests for initiative competency

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Int. of Diff. Lower	Upper			
Pair 1	Initiative – Accurate Self Assessment	-.24088	.41143	.07056	-.38444	-.09733	-3.414	33	.002
Pair 2	Initiative – Emotional Self Awareness	-.27735	.34417	.05903	-.39744	-.15726	-4.699	33	.000
Pair 3	Initiative – Self Confidence	-.58059	.30452	.05222	-.68684	-.47434	-11.117	33	.000
Pair 4	Initiative – Achievement Orientation	-.46471	.28945	.04964	-.56570	-.36371	-9.361	33	.000
Pair 5	Initiative - Adaptability	-.35324	.24975	.04283	-.44038	-.26609	-8.247	33	.000
Pair 6	Initiative – Emotional Self Control	-.15559	.48146	.08257	-.32358	.01240	-1.884	33	.068
Pair 7	Initiative - Optimism	-.60265	.27319	.04685	-.69797	-.50733	-12.863	33	.000
Pair 8	Initiative - Transparency	-.18735	.36345	.06233	-.31417	-.06054	-3.006	33	.005
Pair 9	Initiative - Empathy	-.35353	.37345	.06405	-.48383	-.22323	-5.520	33	.000
Pair 10	Initiative – Organizational Awareness	-.30794	.34826	.05973	-.42945	-.18643	-5.156	33	.000
Pair 11	Initiative – Service Orientation	-.46529	.29592	.05075	-.56855	-.36204	-9.168	33	.000
Pair 12	Initiative – Change Catalyst	-.20382	.26539	.04551	-.29642	-.11123	-4.478	33	.000
Pair 13	Initiative – Developing Others	-.34118	.34109	.05850	-.46019	-.22216	-5.832	33	.000
Pair 14	Initiative - Influence	-.29588	.30339	.05203	-.40174	-.19003	-5.687	33	.000
Pair 15	Initiative – Inspirational Leadership	-.38235	.34188	.05863	-.50164	-.26306	-6.521	33	.000
Pair 16	Initiative – Teamwork Collaboration	-.41647	.33615	.05765	-.53376	-.29918	-7.224	33	.000

Table 4.10. Paired samples t-test for emotional self-control competency

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower	Upper			
Pair 1	ESC – Accurate Self Assessment	-.085	.325	.056	-.199	.028	-1.532	33	.135
Pair 2	ESC – Emotional Self Awareness	-.122	.331	.057	-.237	-.006	-2.144	33	.040
Pair 3	ESC – Self Confidence	-.425	.358	.061	-.550	-.300	-6.930	33	.000
Pair 4	ESC – Achievement Orientation	-.309	.440	.075	-.463	-.156	-4.099	33	.000
Pair 5	ESC - Adaptability	-.198	.320	.055	-.309	-.086	-3.597	33	.001
Pair 6	ESC – Optimism	-.447	.313	.054	-.556	-.338	-8.318	33	.000
Pair 7	ESC - Transparency	-.032	.388	.066	-.167	.103	-.478	33	.636
Pair 8	ESC – Empathy	-.198	.316	.054	-.308	-.088	-3.650	33	.001
Pair 9	ESC – Organizational Awareness	-.152	.420	.072	-.299	-.006	-2.118	33	.042
Pair 10	ESC – Service Orientation	-.310	.337	.058	-.427	-.192	-5.365	33	.000
Pair 11	ESC – Change Catalyst	-.048	.453	.078	-.206	.110	-.621	33	.539
Pair 12	ESC – Developing Others	-.186	.361	.062	-.312	-.060	-2.997	33	.005
Pair 13	ESC – Influence	-.140	.415	.071	-.285	.004	-1.973	33	.057
Pair 14	ESC – Inspirational Leadership	-.227	.349	.060	-.349	-.105	-3.784	33	.001
Pair 15	ESC – Teamwork Collaboration	-.261	.339	.058	-.379	-.142	-4.482	33	.000

warrant an answer to this research question. Overall, there are not enough differences in the mean competency scores to be able to narrow the list. With the exception of Conflict Management and Initiative, it appears that the remainder of the EI competencies had similar mean scores.

Question 3: Are there differences in the emotional intelligence competencies of male and female national Schools to Watch principals?

Table 4.11 provides data on the gender differences in the mean and standard deviation of each of the 18 emotional intelligence competencies. There were 22 females (n = 22) and 12 males (n = 12) participating in the study. Results indicate that females scored higher than males in all but three competencies, with males outscoring females in the following three competencies: accurate self-assessment (males: M = 4.29, SD = 0.29; females: M = 4.20, SD = 0.40), emotional self-control (males: M = 4.19, SD = 0.39; females: M = 4.13, SD = 0.44), and transparency (males: M = 4.19, SD = 0.19; females: M = 4.18, SD = 0.36). The competency of Developing Others had the largest difference in means, with females outscoring males by a difference of 0.24 (males: M = 4.18, SD = 0.39; females: M = 4.42, SD = 0.28).

Next, two-tailed independent samples t-tests were conducted on each of the 18 emotional intelligence competencies to determine if the emotional intelligence competencies of the sample population differed by gender (see Table 4.12). Although females outscored males in nearly all of the competencies, the results of the t-tests revealed a significant difference between males and females in only one of the 18 competencies, which was Developing Others, $t(32) = 2.04$, $p < .05$ (two-tailed). The

Table 4.11. Emotional intelligence competency means by gender

	Gender	N	Mean	Std. Deviation
Accurate Self-Assessment	Female	22	4.20	.40
	Male	12	4.29	.29
Emotional Self-Awareness	Female	22	4.29	.35
	Male	12	4.23	.29
Self-Confidence	Female	22	4.58	.24
	Male	12	4.56	.25
Achievement Orientation	Female	22	4.52	.26
	Male	12	4.34	.27
Adaptability	Female	22	4.40	.25
	Male	12	4.26	.30
Emotional Self-Control	Female	22	4.13	.44
	Male	12	4.19	.39
Initiative	Female	22	4.04	.29
	Male	12	3.91	.27
Optimism	Female	22	4.61	.23
	Male	12	4.57	.26
Transparency	Female	22	4.18	.36
	Male	12	4.19	.19
Empathy	Female	22	4.38	.33
	Male	12	4.29	.32
Organizational Awareness	Female	22	4.36	.30
	Male	12	4.20	.39
Service Orientation	Female	22	4.48	.26
	Male	12	4.43	.23
Change Catalyst	Female	22	4.23	.28
	Male	12	4.13	.22
Conflict Management	Female	22	3.45	.41
	Male	12	3.37	.23
Developing Others	Female	22	4.42	.28
	Male	12	4.18	.39
Influence	Female	22	4.33	.26
	Male	12	4.22	.30
Inspirational Leadership	Female	22	4.46	.28
	Male	12	4.23	.39
Teamwork and Collaboration	Female	22	4.44	.26
	Male	12	4.35	.34

Table 4.12. Independent samples t-test based on gender

Independent Samples Test									
	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	*t*	*df*	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Accurate Self-Assessment	1.692	.203	-.656	32	.516	-.086	.132	-.354	.182
Emotional Self-Awareness	.518	.477	.562	32	.578	.067	.118	-.175	.308
Self-Confidence	.137	.713	.302	32	.765	.027	.088	-.153	.206
Achievement Orientation	.602	.444	1.960	32	.059	.186	.095	-.007	.380
Adaptability	.634	.432	1.435	32	.161	.139	.097	-.058	.336
Emotional Self-Control	.001	.981	-.399	32	.692	-.061	.153	-.372	.250
Initiative	.595	.446	1.266	32	.215	.127	.101	-.078	.332
Optimism	.621	.437	.499	32	.621	.043	.085	-.131	.216
Transparency	4.166	.050	-.061	32	.951	-.007	.111	-.233	.220
Empathy	.204	.654	.742	32	.463	.086	.116	-.151	.324
Organizational Awareness	1.500	.230	1.341	32	.189	.159	.119	-0.83	.400
Service Orientation	.104	.749	.566	32	.575	.051	.089	-.131	.232
Change Catalyst	1.355	.253	1.045	32	.304	.098	.094	-.093	.290
Conflict Management	4.955	.033	.677	32	.503	.087	.128	-.174	.347
Developing Others	4.633	.039	2.042	32	.049	.235	.115	.001	.469
Influence	.806	.376	1.161	32	.254	.113	.098	-.085	.312
Inspirational Leadership	3.679	.064	1.995	32	.055	.231	.116	-.005	.468
Teamwork & Collaboration	.895	.351	.842	32	.406	.087	.103	-.124	.298

finding may be questionable because the results of Levene's Test for Equality of Variances suggests this significance could be due to the variance in the standard deviation, not to the effect of the variable. Achievement Orientation, $t(32) = 1.96$, $p = .059$, and Inspirational Leadership, $t(32) = 2.00$, $p = .055$, were also very close to significant levels.

Question 4: Are there differences in the emotional intelligence competencies of national Schools to Watch principals in rural and non-rural locations?

Table 4.13 provides data on the differences in the mean and standard deviation of each of the 18 emotional intelligence competencies for principals located in rural versus non-rural locations. There were 12 principals in rural locations (n = 12) and 22 principals in non-rural locations (n = 22). Non-rural locations include areas described as either urban or suburban. Results indicate that principals in non-rural areas scored higher than their rural counterparts in all eighteen competencies. Two competencies, Emotional Self-Awareness (rural: M = 4.10, SD = 0.28; non-rural: M = 4.37, SD = .31) and Conflict Management (rural: M = 3.25, SD = .42; non-rural: M = 3.52, SD = .27), tied for having the largest difference in means with the non-rural principals outscoring the rural principals by 0.27.

Table 4.13. Emotional intelligence competency means by rural and non-rural location

	Location	N	Mean	Std. Deviation
Accurate Self-Assessment	Rural	12	4.11	.40
	Non-Rural	22	4.30	.33
Emotional Self-Awareness	Rural	12	4.10	.28
	Non-Rural	22	4.37	.31
Self-Confidence	Rural	12	4.56	.28
	Non-Rural	22	4.58	.22
Achievement Orientation	Rural	12	4.38	.31
	Non-Rural	22	4.50	.26
Adaptability	Rural	12	4.32	.25
	Non-Rural	22	4.36	.29
Emotional Self-Control	Rural	12	4.07	.50
	Non-Rural	22	4.19	.37
Initiative	Rural	12	3.89	.26
	Non-Rural	22	4.05	.28
Optimism	Rural	12	4.52	.23
	Non-Rural	22	4.64	.23
Transparency	Rural	12	4.06	.31
	Non-Rural	22	4.25	.28
Empathy	Rural	12	4.22	.38
	Non-Rural	22	4.41	.27
Organizational Awareness	Rural	12	4.27	.39
	Non-Rural	22	4.31	.31
Service Orientation	Rural	12	4.39	.30
	Non-Rural	22	4.50	.21
Change Catalyst	Rural	12	4.13	.28
	Non-Rural	22	4.23	.26
Conflict Management	Rural	12	3.25	.42
	Non-Rural	22	3.52	.27
Developing Others	Rural	12	4.32	.39
	Non-Rural	22	4.34	.31
Influence	Rural	12	4.27	.27
	Non-Rural	22	4.30	.28
Inspirational Leadership	Rural	12	4.29	.36
	Non-Rural	22	4.42	.33
Teamwork and Collaboration	Rural	12	4.29	.38
	Non-Rural	22	4.48	.20

Two-tailed independent samples t-tests were conducted on each of the 18 emotional intelligence competencies to determine if the emotional intelligence competencies of the sample population differed by rural versus non-rural location (see Table 4.14). Although principals in non-rural areas outscored principals in rural areas in all of the competencies, the results of the t-tests revealed significant differences between the two groups in only two of the competencies: Emotional Self-Awareness, $t(32) = -2.48$, $p < .05$ (two-tailed), and Conflict Management, $t(32) = -2.27$, $p < .05$ (two-tailed).

Question 5: What is the relationship between the socioeconomic status of the school, measured by percentage of students receiving free or reduced lunch, and the emotional intelligence competencies of national Middle Schools to Watch principals?

A Pearson product-moment correlation test was conducted to determine if there was a significant relationship between the socioeconomic status of the school and the emotional intelligence competencies of the principals participating in this study (see Table 4.15). Analysis of correlations between each of the eighteen EI competencies and school socioeconomic status revealed no statistically significant relationships.

Table 4.14. Independent samples t-test based on rural versus non-rural location

Independent Samples Test									
	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	*t*	*df*	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Accurate Self-Assessment	1.582	.218	-1.520	32	.138	-.194	.127	-.455	.066
Emotional Self-Awareness	.043	.837	-2.475	32	.019	-.270	.109	-.492	-.048
Self-Confidence	.474	.496	-.170	32	.866	-.015	.088	-.194	.164
Achievement Orientation	.877	.356	-1.213	32	.234	-.119	.098	-.319	.081
Adaptability	.405	.529	-.398	32	.693	-.040	.100	-.242	.163
Emotional Self-Control	.634	.432	-.846	32	.404	-.128	.152	-.437	.181
Initiative	..001	.972	-1.651	32	.108	-.163	.099	-.365	.038
Optimism	.328	.571	-1.494	32	.145	-.124	.083	-.292	.045
Transparency	1.960	.171	-1.796	32	.082	-.190	.106	-.406	.026
Empathy	2.677	.112	-1.695	32	.100	-.191	.113	-.420	.038
Organizational Awareness	.212	.648	-.375	32	.710	-.046	.122	-.293	.202
Service Orientation	4.299	.046	-1.300	32	.203	-.114	.087	-.292	.064
Change Catalyst	.025	.875	-1.059	32	.297	-.100	.094	-.292	.092
Conflict Management	1.721	.199	-2.265	32	.030	-.271	.120	-.514	-.027
Developing Others	3.822	.059	-.235	32	.816	-.029	.122	-.278	.220
Influence	.063	.803	-.362	32	.720	-.036	.099	-.238	.166
Inspirational Leadership	.761	.390	-1.084	32	.286	-.131	.121	-.377	.115
Teamwork & Collaboration	6.713	.014	-1.949	32	.060	-.193	.099	-.394	.009

Table 4.15. Correlation between school socioeconomic status (SES) and emotional intelligence competency scores of MSTW principals

EI Competency		SES	EI Competency		SES
Accurate Self-Assessment	Pearson (*r*)	.063	Empathy	Pearson (*r*)	.114
	p	.361		*p*	.261
	N	34		N	34
Emotional Self-Awareness	Pearson (*r*)	.048	Organizational Awareness	Pearson (*r*)	.121
	p	.393		*p*	.247
	N	34		N	34
Self-Confidence	Pearson (*r*)	.243	Service Orientation	Pearson (*r*)	.019
	p	.083		*p*	.457
	N	34		N	34
Achievement Orientation	Pearson (*r*)	.111	Change Catalyst	Pearson (*r*)	.179
	p	.267		*p*	.156
	N	34		N	34
Adaptability	Pearson (*r*)	-.052	Conflict Management	Pearson (*r*)	.094
	p	.385		*p*	.298
	N	34		N	34
Emotional Self-Control	Pearson (*r*)	-.079	Developing Others	Pearson (*r*)	.100
	p	.328		*p*	.286
	N	34		N	34
Initiative	Pearson (*r*)	-.090	Influence	Pearson (*r*)	.195
	p	.306		*p*	.134
	N	34		N	34
Optimism	Pearson (*r*)	.059	Inspirational Leadership	Pearson (*r*)	.125
	p	.370		*p*	.241
	N	34		N	34
Transparency	Pearson (*r*)	.004	Teamwork & Collaboration	Pearson (*r*)	.045
	p	.492		*p*	.400
	N	34		N	34

Question 6: What is the relationship between the minority enrollment of the school, measured by percentage of non-Caucasian students, and the emotional intelligence competencies of national Middle Schools to Watch principals?

A Pearson product-moment correlation test was conducted to determine if there was a significant relationship between the minority enrollment of the school and the emotional intelligence competencies of the principals participating in this study (see Table 4.16). Analysis of correlations between each of the eighteen EI competencies and school minority enrollment revealed two statistically significant relationships. A correlation coefficient revealed a small positive correlation between school minority status and the EI competency of Organizational Awareness, $r = +.044$, $p < .05$, one-tailed. Also, a medium positive correlation was found between school minority status and the EI competency of Conflict Management, $r = +.403$, $p < .01$, one-tailed. In addition, Emotional Self-Control was very close to significant levels, demonstrating a small negative correlation, $r = -.273$, $p = .059$, one-tailed. No strong correlation coefficients were identified.

Summary

This chapter presented the statistical analysis of data exploring the emotional intelligence competencies of national Middle Schools to Watch principals from 14 states representing a wide variety of demographic factors. Nearly 90% of the principals met the criteria for emotional intelligence, and the overall group mean scores fell into the high-scoring range for every one of the eighteen EI competencies. The competencies of Conflict Management and Initiative had significantly lower scores within this

Table 4.16. Correlation between school minority enrollment and emotional intelligence competency scores of MSTW principals

EI Competency		Minority Enrollment	EI Competency		Minority Enrollment
Accurate Self-Assessment	Pearson (*r*)	-.046	Empathy	Pearson (*r*)	.070
	p	.398		*p*	.348
	N	34		N	34
Emotional Self-Awareness	Pearson (*r*)	.252	Organizational Awareness	Pearson (*r*)	.297
	p	.075		*p*	.044
	N	34		N	34
Self-Confidence	Pearson (*r*)	.092	Service Orientation	Pearson (*r*)	.145
	p	.303		*p*	.207
	N	34		N	34
Achievement Orientation	Pearson (*r*)	.207	Change Catalyst	Pearson (*r*)	.100
	p	.120		*p*	.286
	N	34		N	34
Adaptability	Pearson (*r*)	.003	Conflict Management	Pearson (*r*)	.403
	p	.493		*p*	.009
	N	34		N	34
Emotional Self-Control	Pearson (*r*)	-.273	Developing Others	Pearson (*r*)	-.067
	p	.059		*p*	.354
	N	34		N	34
Initiative	Pearson (*r*)	.194	Influence	Pearson (*r*)	.176
	p	.136		*p*	.160
	N	34		N	34
Optimism	Pearson (*r*)	.067	Inspirational Leadership	Pearson (*r*)	.186
	p	.354		*p*	.146
	N	34		N	34
Transparency	Pearson (*r*)	.111	Teamwork & Collaboration	Pearson (*r*)	.175
	p	.266		*p*	.161
	N	34		N	34

group than the other competencies, but these were still in the high-scoring range. A few significant differences and relationships were found between specific emotional intelligence competencies and the principal's gender, location of the school, socioeconomic status of the school and minority enrollment of the school, but there were very few and, thus, likely attributable to chance. Implications of this research, conclusions, and recommendations for further study are presented in the next chapter.

CHAPTER 5

SUMMARY AND DISCUSSION

The primary objective of this study was to investigate the emotional intelligence competencies of national Middle Schools to Watch principals, and to compare differences within the overall emotional intelligence competency scores to determine if there was a common set of competencies exhibited by these high-performing principals. Ultimately, these results may provide information about the recruitment and screening of middle school principal applicants, as well as guidance for the design of more effective professional development for middle school administrators. This chapter will summarize the research and results of this study, discuss the findings and implications for principal leadership, and provide recommendations for future related research.

Summation of the Research

Educational Leadership Research

"The principal is the single most influential person in a school," and a school's effectiveness, or ineffectiveness, can often be traced directly back to the leader's doorstep (Marzano, Waters & McNulty, 2005, p. 5). In fact, the principal is the #2 factor, second only to direct classroom instruction, among all school-related factors that impact student achievement (Leithwood, Harris & Hopkins, 2008; Nettles & Herrington, 2007; Marzano, Waters & McNulty, 2005). Many studies have been conducted in an effort to pinpoint the traits, behaviors and characteristics of effective school leaders.

Ten traits of high-performing school principals repeatedly appear throughout the literature. These successful school leaders are effective communicators, optimistic, caring/demonstrate concern for others, trustworthy/trusting of others, flexible/open-minded, committed/strong work ethic, ethical/strong value system, supportive/values others, efficacious/self-confident, and passionate. In addition, these leaders exhibit the following behaviors: distribute leadership, analyze data, promote professional development, protect instructional time, continuously monitor, involve parents and the community, maintain high visibility, model expectations, and reward and provide feedback.

Principals of middle grades schools have an especially daunting task. These leaders serve a distinct population of young adolescents undergoing immense physical and physiological changes in growth, maturation, puberty, and brain development (Caskey & Anfara, 2007). This time period of rapid development is unmatched at any other age, resulting in occupational challenges for middle school educators that are unlike those faced by their elementary and high school counterparts.

The majority of students enrolled in U. S. public schools in grades 5 through 8 are exhibiting substandard performance on national and state performance assessments (NMSA, 2004); however, there are middle schools that embody high achievement and success. The national Middle Schools to Watch (MSTW) program recognizes these successful middle schools across the nation to serve as models of excellence. Not surprisingly, the success of these schools can often be traced back to the school's leader. "No single individual is more important to initiating and sustaining improvement in

middle grades school students' performance than the school principal" (Jackson & Davis, 2000, p. 157).

Emotional Intelligence Research

Emotional intelligence has emerged as a model of effective leadership, and a positive relationship between emotional intelligence and highly effective leaders has already been established across a variety of occupations (Goleman, Boyatzis & Mckee, 2002). The majority of these studies have been conducted in the business sector, indicating that leaders who are emotionally intelligent have more impact on the profits, performance and productivity of the organization than their average performing counterparts (Cherniss, 2002). It is more difficult to study the impact of a school leader's emotional intelligence on the organization because the product, student performance, is more difficult to measure than monetary gains. However, recent studies indicate a significant link between emotional intelligence and the performance of school leaders (Stone, Parker & Wood, 2005; Cook, 2006; Bardach, 2008; Williams, 2008).

Emotional intelligence is "the capacity for recognizing our own feelings and those of others, for motivating ourselves and for managing emotions effectively in ourselves and others" (Hay Group, 2005, p. 2). Emotional intelligence is much more than just demonstrating an upbeat personality; it is the ability to understand how one's emotions can impact the moods and performance of others around him in both positive and negative ways.

There are three widely accepted models of emotional intelligence theory: Mayer-Salovey, Bar-On and Goleman. Daniel Goleman's model, specifically designed to

measure the impact of emotional intelligence in the workplace, consists of eighteen specific emotional intelligence competencies grouped into four overall clusters (see Table 2.1). As will be discussed further in this chapter, these eighteen competencies clearly correspond to the leadership traits and behaviors mentioned above, as well as to national research initiatives for the improvement of school leaders. The overlaps between emotional intelligence research and research on effective school leaders are startlingly similar.

The research on educational leadership and emotional intelligence presented in Chapter Two provided the foundation for this study. A summary of the results and key findings from Chapter Four are summarized below.

Summary of Results and Findings

The results of this study were consistent with other prominent research studies in the field of emotional intelligence, indicating that leaders of high-performing schools are emotionally intelligent. The analysis of data resulted in these findings:

1. *Principals of national Middle Schools to Watch exhibit high levels of emotional intelligence.* 88.2% (n = 30) of the participants met the criteria for emotional intelligence by demonstrating high level means in six or more EI competencies across all four clusters. In addition, when the scores for all participants were combined, the mean scores for all 18 competencies were in the high-level range with relatively small standard deviations. One sample t-tests comparing the mean competency scores of the MSTW principals against the norm Administration scores provided by Hay Group (2005) indicated the MSTW principals scored

significantly higher than the norm group in all 18 competencies. Thus, the national Middle Schools to Watch principals participating in this study are emotionally intelligent.

This has implications for the training and recruitment of middle school principals, indicating that emotional intelligence may be a valid addition to professional development programs and applicant screening processes.

2. *There is no common set, or "short list," of emotional intelligent competencies shared by this group of MSTW principals.* Based on the results of rank-ordering the mean competency scores, the following six EI competencies had the highest means: optimism, self-confidence, service orientation, achievement orientation, teamwork & collaboration, and inspirational leadership. The results of a one way within-subjects ANOVA indicated significant differences among the 18 emotional intelligence competencies for this group of MSTW principals ($F = 48.65$, $df_w = 17$, $p = 0.00$, $\eta^2 = .60$).

Since this group did not lend itself to a between-groups comparison, post hoc tests could not be run. Selected paired-samples t-tests were run to identify the significant differences among the mean competency scores. It was determined that Conflict Management scored significantly lower than the other 17 competencies. Also, Initiative scored significantly lower than the remaining competencies, with the exception of Emotional Self-Control, $t(33) = -1.88$, $p > .05$ (two-tailed). Further testing with additional competencies began to show much fewer significant differences. Overall, there were not enough differences in the mean competency scores to be able to narrow the list further. With the exception

of Conflict Management and Initiative, the remainder of the EI competencies for this group of MSTW principals had similar mean scores.

If a common set, or short list, of competencies had been identified, it could have implications for the development of school leadership training programs focused on those particular competencies. As it is, the results of this study indicate principal training and recruitment programs should focus on the principals' overall emotional intelligence without attention to any specific competency. High scores in any specific set or combination of competencies appear unnecessary, as long as the principal is emotionally intelligent overall.

3. *Emotional intelligence of MSTW principals is not impacted by demographic factors of principal gender, location of the school, socioeconomic status of the school, and minority enrollment of the school.* Two-tailed independent samples t-tests indicated very few differences based on principal gender or rural vs. non-rural location of the school. The results of the t-tests revealed a significant difference between males and females in only one of the 18 competencies, which was Developing Others, $t(32) = 2.04$, $p < .05$ (two-tailed). Achievement Orientation, $t(32) = 1.96$, $p = .059$, and Inspirational Leadership, $t(32) = 2.00$, $p = .055$, were also very close to significant levels when comparing gender differences. When comparing principals of schools in rural and non-rural locations, there were significant differences between the two groups in only two of the competencies: Emotional Self-Awareness, $t(32) = -2.48$, $p < .05$ (two-tailed), and Conflict Management, $t(32) = -2.27$, $p < .05$ (two-tailed). Since these

were the only significant differences, these differences for gender and school location could likely be attributed to chance.

Pearson product-moment correlation tests were conducted to determine if there was a significant relationship between the socioeconomic free/reduced lunch status of the school and the emotional intelligence competencies of the MSTW principals, and also for non-Caucasian minority enrollment of the school. Analysis of correlations between each of the eighteen EI competencies and school socioeconomic status revealed no statistically significant relationships between the principals' EI and the schools' socioeconomic status. For school minority status, two statistically significant relationships were found. A correlation coefficient revealed a small positive correlation between school minority status and the EI competency of Organizational Awareness, $r = +.044$, $p < .05$, one-tailed. Also, a medium positive correlation was found between school minority status and the EI competency of Conflict Management, $r = +.403$, $p < .01$, one-tailed. In addition, Emotional Self-Control was very close to significant levels, demonstrating a small negative correlation, $r = -.273$, $p = .059$, one-tailed. No strong correlation coefficients were identified. Again, since so few significant relationships were found, and none of them were strong, these relationships could likely be attributed to chance.

These results imply that emotional intelligence in MSTW principals exists independently from these demographic factors. Often times, high-achieving schools, and therefore the principals that lead them, are thought to be high-achieving only because of the makeup or background of their student population.

These results indicate that no matter the demographics, high-levels of emotional intelligence are a common factor among this group of principals.

Limitations of the Research

Limitations to this study are as follows:

- The scope of this research is limited to the 16 states that are currently active in the national Middle Schools to Watch (MSTW) program: Arkansas, California, Colorado, Georgia, Illinois, Indiana, Kentucky, Michigan, New Jersey, New York, North Carolina, Ohio, Pennsylvania, South Carolina, Utah and Virginia. Out of these states, no principals from Michigan or South Carolina had valid survey results, so 14 states are represented in the study.
- Since the survey is a 360° model, the participating principal, not the researcher, chooses the respondents who will complete the emotional intelligence competency instrument.
- This population of MSTW principals does not lend itself to a comparison group because it cannot be assumed that just because a school has not been named a MSTW, that school is not high-achieving -- perhaps they just have not taken the time to apply for the recognition or live in a state that does not have an active MSTW program. Therefore, the results of this study will provide information about the emotional intelligence of this group of principals, but not if those results are similar to or different from principals of lower-achieving schools.

- All current MSTW principals who met the criteria were allowed voluntary participation in the study, so the respondents might not be a true representative sampling of the population.
- There was a low response rate for this study (n = 34). Out of 154 principals who qualified to participate, 34 completed the survey requirements and were included in the study, for a 22% response rate.

Recommendations for Further Research

Further studies should be conducted among middle school principals to address the limitations of this research and gain additional insight into the relationship between a principal's emotional intelligence and school success. Future studies should consider and address the following:

- Although this study included principals from 14 states, expanding the scope of future research studies to include principals from all 50 states would provide more generalizable information. Since the MSTW program is not established in all states, high-achieving would have to be defined in a different way.
- Instead of having participants select their own survey respondents which could lead to biased results, randomly select survey respondents who are employed in the school and district where the principal works.
- It is recommended that future studies include a comparison group of principals of low-achieving schools. This will allow the emotional intelligence of both sets of principals to be compared to determine if there are any significant differences between these two groups.

- Since the sample size for this study was relatively small (n = 34), future research studies should broaden the sampling frame to include more principals.
- Conducting similar studies with elementary and high school principals would allow comparisons between all three levels of leaders. This would provide information about the similarities and differences of the emotional intelligence of school leaders at different grade levels.
- The addition of qualitative measures, such as interviews and observations, would offer insight into how leaders apply their emotional intelligence and what that looks like in practice.

Conclusion

Past research on educational leadership has led to an overabundance of theories, traits and behaviors, and principals struggle to replicate these in a quest to become more effective. These theories can appear on the surface to be mutually exclusive, even contradictory in some cases, resulting in confusion among school practitioners as to which theory, if any, to follow.

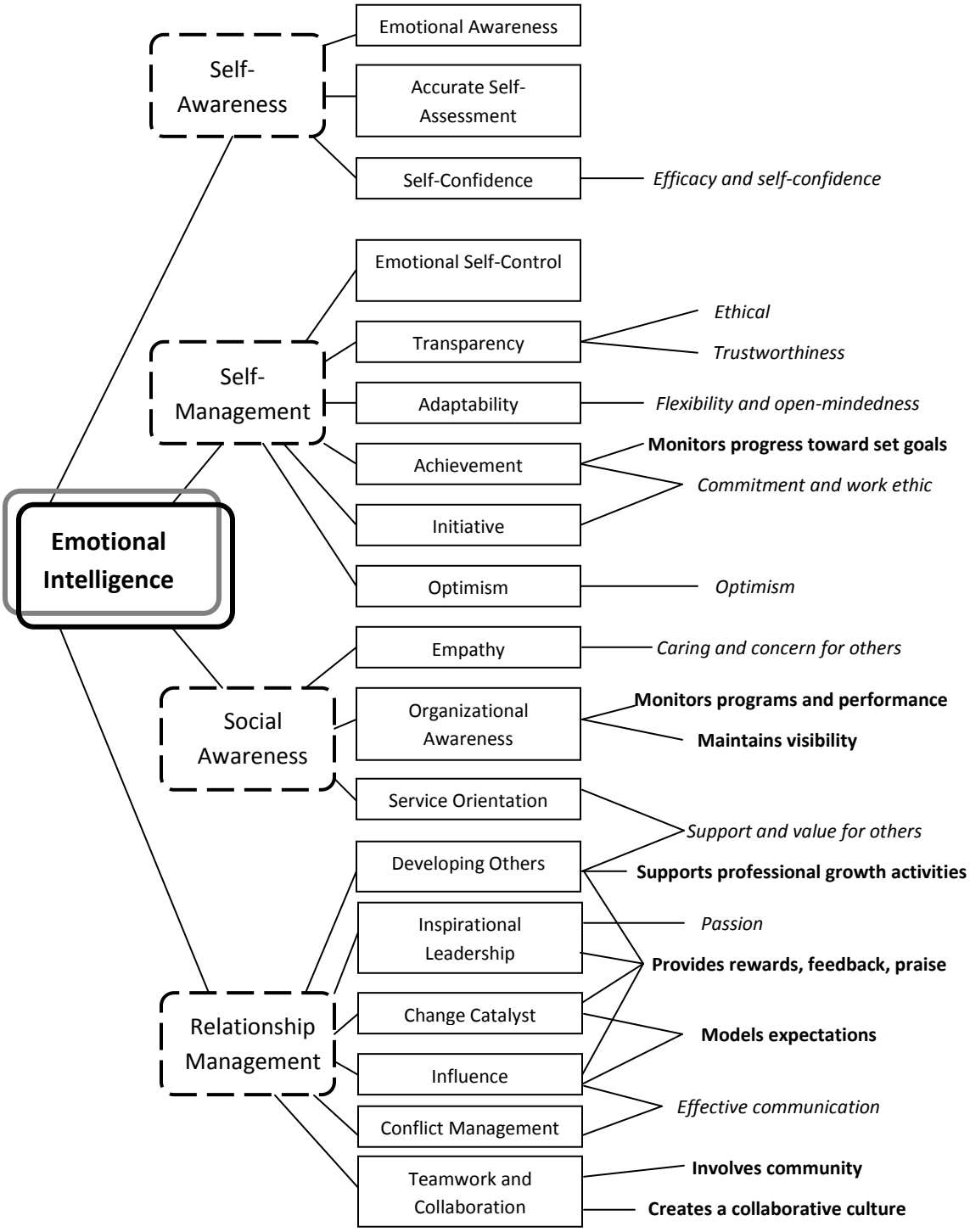
This researcher, like many others before her, began this research hoping to find answers to the question, "What makes an effective school principal?" As the review of literature progressed, the similarities and overlap between the research on effective school leaders and the research on emotional intelligence became apparent, even though few of the educational leadership studies mention emotional intelligence by name.

If the leadership theories and lists of common traits and behaviors of effective principals discussed in Chapter Two are compared to the eighteen emotional intelligence competencies, many parallels become evident (see Figure 5.1).

Each of the traits and behaviors from the research can be linked to a related emotional intelligence competency. Most of them correspond with the EI clusters of self-management, social awareness and relationship management. The cluster of self-awareness only directly corresponds to one trait; however, since self-awareness is not something that is demonstrated outwardly through observable traits and behaviors, this is not surprising.

In a similar fashion, a crosswalk between the 21 Balanced Leadership Responsibilities (see Table 2.3), the ISLLC standards (see Figure 2.1), the SREB factors (see Figure 2.2) and Goleman's EI framework shows additional connections between EI and school leadership research (see Table 5.1).

Each one of the 21 Balanced Leadership responsibilities, the critical success factors and the ISLLC standards can be linked to at least one EI competency. Some of these links are a direct match and mention EI competencies by name; for example, ISLLC Standard 5B states that education leaders "model principles of self-awareness, reflective practice, transparency, and ethical behavior." This is a direct match to the EI self-awareness and transparency competencies. Other links are not so explicit, but are indirectly related; for example, ISLLC Standard 1A and SREB Critical Success Factor 1 both pertain to the development and implementation of a shared mission and vision. Although not specifically named in the EI competencies, it is understood that to accomplish this task one must possess, at a minimum, the competencies of inspirational



NOTE: Traits are in italics and behaviors are in bold print

Figure 5.1. Relationship between emotional intelligence and common traits and behaviors of effective school principals

Table 5.1. Crosswalk of Goleman's emotional intelligence (EI) framework, 21 balanced leadership (BL) responsibilities, Interstate Leadership Licensure Consortium (ISLLC) standards, and Southern Regional Education Board's (SREB) 13 critical success factors for principals

EI Clusters	EI Competencies	21 BL Responsibilities	ISLLC Standards	SREB Factors
Self-Awareness	Emotional Awareness	18	5B	
	Accurate Self-Assessment		5B	
	Self-Confidence		5B	
Self-Management	Emotional Self-Control	18	5B	
	Transparency	9	5B, 5C, 5D, 5E	
	Adaptability	7	1E, 3E, 6C	CSF 8
	Achievement	8, 11, 15	1D, 6C	CSF 3, CSF 5, CSF 13
	Initiative	15	1D, 3B, 6C	CSF 5, CSF 10, CSF 11
	Optimism	17	1A, 1D, 5B, 6B	
Social Awareness	Empathy	18	2A, 4B, 5D, 5E, 6A	CSF 4
	Organizational Awareness	6, 7, 14, 16, 18, 19, 20, 21	1E, 2A, 2D, 2E, 2H, 2I, 3A, 3C, 3E, 4A, 5D	CSF 5, CSF 9, CSF 11
	Service Orientation	1, 4, 17, 18, 21	2C, 3C, 4B, 4C, 4D, 5C, 5D, 5E	CSF 4, CSF 7, CSF 12
Relationship Management	Developing Others	1, 4, 8, 10, 11, 14, 19	1B, 2C, 2D, 2F, 2H, 3D	CSF 3, CSF 9
	Inspirational Leadership	1, 5, 8, 11, 12, 13, 15, 17, 21	1A, 1B, 1D, 2A, 2B	CSF 1, CSF 2, CSF 5
	Change Catalyst	2, 8, 11, 12, 13, 19	1B, 2B, 2E	CSF 5, CSF 8, CSF 9
	Influence	3, 6, 8, 10, 11, 15, 17	1B, 1C, 1D, 2G, 2H, 3E, 6B	CSF 5, CSF 6, CSF 10, CSF 12
	Conflict Management	3, 5, 7, 10, 15, 16, 18, 20, 21	1A, 1C, 1E, 4B, 4C, 4D, 5D, 6A, 6B	CSF 1, CSF 2, CSF 6
	Teamwork and Collaboration	3, 5, 8, 10, 12, 13, 18	1A, 1C, 1D, 2A, 2B, 2E, 3D, 4D, 5A	CSF 1, CSF 6, CSF 12

leadership, conflict management, and teamwork and collaboration. As with the traits and behaviors, the connections are heaviest in the three EI clusters of self-management, social awareness and relationship management because these are the clusters that can be outwardly observed and noted by others.

This overlap in traits, behaviors, national standards and emotional intelligence competencies show that EI research is consistent with the major current research findings in school leadership. Also, emotional intelligence competencies can be learned, continuing to grow and improve throughout a person's life (Buntrock, 2008; Cook, 2006; Goleman, Boyatzis & McKee, 2002). Organizations that have implemented courses, workshops and trainings on competence building have been effective at improving and sustaining emotional competencies, resulting in better performance in the workplace (Cook, 2006). The emergence of emotional intelligence as a framework for successful school administrators, including those at the middle school level, is one more link in the study of effective school leaders.

Instead of seeking to answer the unanswerable question of, "What do effective school leaders DO?" research on educational leaders should focus on, "How do effective school leaders PROCESS and RESPOND to employees and organizational demands?" That ability is what seems to make the difference.

This distinction highlights the problems with some current leadership training programs and evaluation methods. Often, the focus is not on developing necessary competencies, but rather on producing or collecting the documentation to check items off a checklist. For example, we know that effective schools and leaders have a clear mission and vision that drives the work of the school. Instead of working with leaders on

strategies for keeping the vision a focused part of the daily work of the school, many evaluations and trainings have reduced this concept to, "Has your school developed vision and mission statements, and are they posted?" If the principal can say, "Yes," and if teachers and stakeholders can point to them, then this is marked off on the 'checklist' and considered good work. This disconnect leads to an anomaly – school leaders can believe they are doing all the right things because they work very hard to check all the items off the list and earn very high marks in a course or on an evaluation, but yet still have no impact on the success of the school they lead.

Effective leaders do have a clear vision and mission, but it's not writing this down and posting it that makes it come to life. The "soft skills" of emotional intelligence can make the vision come to life – the ability of the leader to inspire people to support the mission, the ability to manage conflict when people disagree with the mission or have different ideas about how to reach those goals, the organizational awareness to know what structures work best in that particular building with those particular dynamics to continually move toward the vision. It is about having the competencies, which can be linked to high levels of emotional intelligence, to put those tasks into action with varying groups of people.

The findings of this study indicated that demographic factors did not play a significant role in the emotional intelligence of MSTW principals. However, there were a few isolated results that have potential implications for the training and development of school leaders. In most emotional intelligence research, females tend to significantly outscore males in all competencies (Goleman, 1995; Hay Group, 2005). For this reason, the majority of EI measurement instruments, including the ECI 2.0, provide norms for

males and females. For this group of MSTW principals, the females outscored the males in only one competency, Developing Others. Achievement Orientation and Inspirational Leadership were also close to significant levels with females outscoring males. It is unclear from the results of this study why there were not more significant differences between the EI competencies of males and females. One reason could be that most EI research has been done in the business sector, where males and females are often still viewed in a more traditional role and "emotions" are not a widely accepted masculine trait. The realm of education is a nurturing and service-oriented profession which is largely dominated by females, and the recognition of emotions and emotional-management is more widely accepted as an integral part of the profession. For this reason, males in education may be more comfortable openly asserting and developing their emotional intelligence because it is more accepted in that environment.

Another finding that merits further study is the difference between the principals in rural and non-rural locations. Non-rural principals significantly outscored their rural counterparts in the competencies of Emotional Self-Awareness and Conflict Management. This could be attributed to the relative homogeneity of most rural communities in terms of income, values and racial makeup. Heterogeneity breeds conflict of both the positive and negative type. Principals in non-rural locations would have to exercise more conflict management skills and more emotional self-awareness in order to deal with the extreme cultural and racial differences that are often present in these areas. That isn't to say that conflict doesn't exist in a rural setting, only that the nature of the conflicts and the solutions are different in rural areas where the people are from a more cohesive and similar background. Leadership preparation and development

programs who service school leaders in rural versus non-rural areas should be aware of these differences when designing their programs.

Finally, there were positive correlations between the minority enrollment of the school and the Organizational Awareness and Conflict Management skills of the principal, although neither of these correlations was strong. This can possibly be attributed to the increased need for sensitivity to racial issues, prejudice, and cultural differences in schools where there are a variety of ethnicities. A school leader who works with a number of different races must exhibit high levels of Organizational Awareness to be in tune to cultural tensions before they become major problems, and to be able to deal with conflict effectively in the wake of problems. Interestingly, the results for the Emotional Self-Control competency was close to significant, indicating a possible small negative correlation with minority enrollment; the higher the enrollment of minority students in a school, the lower the Emotional Self-Control score of the principal. Again, this could be attributed to the likelihood that the principal in a school with a high minority enrollment will be dealing more often with racial and cultural issues, which can often be intense, volatile and emotionally-charged situations where it is difficult to keep emotions under control. Armed with this knowledge, the creators of leadership development and preparation courses could intentionally develop these competencies in school leaders who are serving high minority populations.

Based on the limitations of this study, definitive conclusions and generalizations cannot be made about the actual role emotional intelligence plays, or doesn't play, in the success of middle school leaders. Additional research needs to be conducted on the emotional intelligence of principals of low-achieving middle schools for comparison

purposes. Significant differences in the emotional intelligence of high-achieving and low-achieving principals would have valuable implications for preparing and training middle school leaders. If no differences in emotional intelligence were found between these two groups, it would indicate that factors other than emotional intelligence may be contributing to the differences. However, the results of this study do indicate that there is a significant link between emotional intelligence and successful middle school leaders that warrants further exploration.

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APPENDIX A

The National Forum to Accelerate Middle-Grade Reform Schools-to-Watch Criteria and Descriptors

Table A1. NFAMGR Schools-to-Watch descriptors for academic excellence criteria

I. Academic Excellence: *High-performing schools with middle grades challenge all students to use their minds well.*	
AE1	All students are expected to meet high academic standards.
AE2	Curriculum, instruction, assessment and appropriate academic interventions are aligned with high standards.
AE3	The curriculum emphasizes deep understanding of important concepts and the development of essential skills.
AE4	Instructional strategies include a variety of challenging and engaging activities that are clearly related to the grade-level standards, concepts and skills being taught.
AE5	Teachers use a variety of methods to assess and monitor the progress of student learning (e.g., tests, quizzes, assignments, exhibitions, projects, performance tasks, portfolios).
AE6	The faculty and master schedule provide students with time to meet rigorous academic standards.
AE7	Students are provided the support they need to meet rigorous academic standards.
AE8	The adults in the school are provided time and frequent opportunities to enhance student achievement by working with colleagues to deepen their knowledge and to improve their standards-based practice.

Source: Adapted from www.middleschoolhouse.eku.edu

Table A2. NFAMGR Schools-to-Watch descriptors for developmental responsiveness criteria

II. Developmental Responsiveness: *High-performing schools with middle grades are sensitive to the unique developmental challenges of early adolescence.*	
DR1	The staff creates a personalized environment that supports each student's intellectual, ethical, social and physical development.
DR2	The school provides access to comprehensive services to foster health physical, social, emotional and intellectual development.
DR3	Teachers foster curiosity, creativity and the development of social skills in a structured and supportive environment.
DR4	The curriculum is both socially significant and relevant to the personal and career interests of young adolescents.
DR5	Teachers use an interdisciplinary approach to reinforce important concepts, skills and address real-world problems.
DR6	Students are provided multiple opportunities to explore a rich variety of topics and interests in order to develop their identity, learn about their strengths, discover and demonstrate their own competence and plan for their future.
DR7	All students have opportunities for voice – posing questions, reflecting on experiences and participating in decisions and leadership activities.
DR8	The school staff members develop alliances with families to enhance and support the well-being of the students.
DR9	Staff members provide all students with opportunities to develop citizenship skills, to use the community as a classroom and to engage the community in providing resources and support.
DR10	The school provides age-appropriate, co-curricular activities to foster social skills and character and to develop interests beyond the classroom environment.

Source: Adapted from www.middleschoolhouse.eku.edu

Table A3. NFAMGR Schools-to-Watch descriptors for social equity criteria

III. Social Equity: *High-performing schools with middle grades are socially equitable, democratic and fair. They provide every student with high-quality teachers, resources, learning opportunities and supports. They keep positive options open for all students.*	
SE1	To the fullest extent possible, all students, including English learners, students with disabilities, gifted and honors students, participate in heterogeneous classes with high academic and behavioral expectations.
SE2	Students are provided the opportunity to use many and varied approaches to achieve and demonstrate competence and mastery of standards.
SE3	Teachers continually adapt curriculum, instruction, assessment and scheduling to meet their students' diverse and changing needs.
SE4	All students have equal access to valued knowledge in all school classes and activities.
SE5	Students have on-going opportunities to learn about and appreciate their own and others' cultures.
SE6	The school community knows every student well.
SE7	The faculty welcomes and encourages the active participation of all its families and makes sure that all its families are in integral part of the school.
SE8	The school's reward system is designed to value diversity, civility, service and democratic citizenship.
SE9	Staff members understand and support the family backgrounds and values of its students.
SE10	The school rules are clear, fair and consistently applied.

Source: Adapted from www.middleschoolhouse.eku.edu

Table A4. NFAMGR Schools-to-Watch descriptors for organizational structures and processes criteria

IV. Organizational Structures and Processes: *High-performing schools with middle grades are learning organizations that establish norms, structures and organizational arrangements to support and sustain their trajectory toward excellence.*	
OS1	A shared vision of what a high-performing school is and does drives every facet of school change.
OS2	The principal has the responsibility and authority to hold the school-improvement enterprise together, including day-to-day know-how, coordination, strategic planning and communication.
OS3	The school is a community of practice in which learning, experimentation, and time and opportunity for reflection are the norm.
OS4	The school and district devote resources to content-rich professional development which is connected to reaching and sustaining the school vision and increasing student achievement.
OS5	The school is not an island unto itself; it is part of a larger educational system, i.e., districts, networks and community partnerships.
OS6	The school staff holds itself accountable for the students' success.
OS7	District and school staff possess and cultivate the collective will to persevere, believing it is their business to produce increased achievement and enhanced development of all students.
OS8	The school and district staffs work with colleges and universities to recruit, prepare and mentor novice and experienced teachers.
OS9	The school includes families and community members in setting and supporting the school's trajectory toward high performance.

Source: Adapted from www.middleschoolhouse.eku.edu

APPENDIX B

Informed Consent Form

Consent to Participate in a Research Study
(Principal Consent)

An Investigation of the Emotional Intelligence Competencies of National Middle Schools to Watch Principals

Why am I being asked to participate in this research?

You are being invited to take part in a research study about the emotional intelligence competencies of Schools to Watch principals. You are being invited to participate in this research study because you are the principal of a School to Watch. If you take part in this study, you will be one of about 225 principals invited to do so.

Who is doing the study?

The person in charge of this study is Michele Reynolds, a doctoral student in the department of Educational Leadership and Policy Studies at Eastern Kentucky University. She is being guided in this research by Dr. James Rinehart.

What is the purpose of the study?

The main purpose of this study is to investigate the emotional intelligence competencies of Schools to Watch principals and to determine if there are any specific emotional intelligence traits shared by this group. By doing this study, we hope to learn more about the leadership traits of successful middle school principals. The results from this research have the potential to provide valuable information to school boards, school-based decision-making councils, instructors of educational leadership preparation and development programs, current middle school principals, and candidates for middle school principal positions as they seek to hire the most qualified principals and improve the abilities of the existing principals in their local middle schools.

Where is the study going to take place and how long will it last?

The study consists of a survey completed by outside respondents that have a working relationship with you. The survey will take approximately 20 minutes to complete. The survey will be conducted through SurveyMonkey.com, a secure online website, which is accessible 24 hours a day, 7 days a week from any internet-capable computer. Survey respondents will have two weeks from the date of receipt to complete the survey.

What will I be asked to do?

You will be asked to complete a brief questionnaire containing demographic information about yourself and your school. You will also be asked to identify at least five colleagues and forward a survey link to them to complete the Emotional Competence Inventory 2.0 on your behalf. These people should include a variety of people with which you have a working relationship, including your direct supervisor(s), as well as certified and classified staff members employed in your school from a variety of subject areas and positions.

What are the possible risks?

To the best of our knowledge, participating in this study involves no more risk of harm than you would experience in everyday life. All survey results will be kept entirely confidential with no identifying information attached, and all results will be coded and reported in the aggregate. Your participation is entirely voluntary and you may choose to withdraw from the study at any time.

Will I benefit from taking part in this study?

You will not get any personal benefit from taking part in this study. However, the results of your participation can add to the current body of research on effective middle school leadership.

Do I have to take part in this study?

If you decide to take part in the study, it should be because you really want to volunteer. You will not lose any benefits or rights you would normally have if you choose not to volunteer. You can stop at any time during the study and still keep the benefits and rights you had before volunteering.

If I don't take part in this study, are there other choices?
If you do not want to be in the study, there are no other choices except to not take part in the study.

What will it cost me to participate?
There are no costs associated with taking part in this study, other than the time it takes you to complete the survey.

Will I receive any payment or rewards for taking part in the study?
You will not receive any payment or tangible reward for taking part in this study.

Who will see the information I give?
Your information will be combined with information from other people taking part in the study. When we write up the study to share it with other researchers, we will write about this combined information. You will not be identified in these written materials. Signed consent forms are the only information that will contain your name.

Can I end my participation early?
If you decide to take part in the study, you still have the right to decide at any time that you no longer want to participate. You will not be treated differently if you decide to stop taking part in the study.

What if I have questions?
Before you decide whether to accept this invitation to take part in the study, please ask any questions that might come to mind now. Later, if you have questions about the study, you can contact the investigator, Michele Reynolds, through email at michele_reynolds24@eku.edu or by phone at (606)669-0156. If you have any questions about your rights as a research volunteer, contact the staff in the Division of Sponsored Programs at Eastern Kentucky University at 859-622-3636.

I have thoroughly read this document, understand its contents, have been given an opportunity to have my questions answered, and agree to participate in this research project.

_____ _____

Signature of person agreeing to take part in the study Date

_____

Printed name of person taking part in the study

Michele Gillians Reynolds

Name of person providing information to subject

APPENDIX C

Emotional Intelligence Competency Average Ratings and Levels

Table C1. Emotional intelligence competencies, average ratings and levels – principal 1

Cluster	Competency	Average Rating	Competency Level
Self-Awareness	Accurate Self-Assessment	4.32	**High**
Self-Awareness	Emotional Self-Awareness	4.15	**High**
Self-Awareness	Self-Confidence	4.72	**High**
Self-Management	Achievement Orientation	4.59	**High**
Self-Management	Adaptability	4.60	**High**
Self-Management	Emotional Self-Control	4.23	**High**
Self-Management	Initiative	4.36	**High**
Self-Management	Optimism	4.65	**High**
Self-Management	Transparency	4.22	**High**
Social Awareness	Empathy	4.38	**High**
Social Awareness	Organizational Awareness	4.43	**High**
Social Awareness	Service Orientation	4.49	**High**
Relationship Management	Change Catalyst	4.51	**High**
Relationship Management	Conflict Management	3.51	**High**
Relationship Management	Developing Others	4.64	**High**
Relationship Management	Influence	4.67	**High**
Relationship Management	Inspirational Leadership	4.56	**High**
Relationship Management	Teamwork & Collaboration	4.36	**High**

Note. Scores (ranging from 1 to 5) for each question, from each respondent, resulted in an average for each question. An average of the four questions in each competency resulted in an Average Rating. Competency levels were then determined using a table of average-item scores equivalent to high, medium, and low competency levels (Hay Group, 2005, p. 7).

Table C2. Emotional intelligence competencies, average ratings and levels – principal 2

Cluster	Competency	Average Rating	Competency Level
Self-Awareness	Accurate Self-Assessment	3.63	Medium
Self-Awareness	Emotional Self-Awareness	3.66	**High**
Self-Awareness	Self-Confidence	4.45	Medium
Self-Management	Achievement Orientation	4.43	**High**
Self-Management	Adaptability	4.15	**High**
Self-Management	Emotional Self-Control	3.27	Low
Self-Management	Initiative	4.25	**High**
Self-Management	Optimism	4.28	**High**
Self-Management	Transparency	3.90	**High**
Social Awareness	Empathy	3.85	Low
Social Awareness	Organizational Awareness	4.04	**High**
Social Awareness	Service Orientation	4.18	Medium
Relationship Management	Change Catalyst	4.02	**High**
Relationship Management	Conflict Management	3.65	**High**
Relationship Management	Developing Others	3.91	Medium
Relationship Management	Influence	4.23	**High**
Relationship Management	Inspirational Leadership	4.07	Medium
Relationship Management	Teamwork & Collaboration	3.83	Low

Note. Scores (ranging from 1 to 5) for each question, from each respondent, resulted in an average for each question. An average of the four questions in each competency resulted in an Average Rating. Competency levels were then determined using a table of average-item scores equivalent to high, medium, and low competency levels (Hay Group, 2005, p. 7).

Table C3. Emotional intelligence competencies, average ratings and levels – principal 3

Cluster	Competency	Average Rating	Competency Level
Self-Awareness	Accurate Self-Assessment	4.33	**High**
Self-Awareness	Emotional Self-Awareness	4.60	**High**
Self-Awareness	Self-Confidence	4.63	**High**
Self-Management	Achievement Orientation	4.64	**High**
Self-Management	Adaptability	4.48	**High**
Self-Management	Emotional Self-Control	4.13	**High**
Self-Management	Initiative	4.06	**High**
Self-Management	Optimism	4.63	**High**
Self-Management	Transparency	4.40	**High**
Social Awareness	Empathy	4.54	**High**
Social Awareness	Organizational Awareness	4.42	**High**
Social Awareness	Service Orientation	4.78	**High**
Relationship Management	Change Catalyst	4.29	**High**
Relationship Management	Conflict Management	3.28	**High**
Relationship Management	Developing Others	4.58	**High**
Relationship Management	Influence	4.38	**High**
Relationship Management	Inspirational Leadership	4.46	**High**
Relationship Management	Teamwork & Collaboration	4.67	**High**

Note. Scores (ranging from 1 to 5) for each question, from each respondent, resulted in an average for each question. An average of the four questions in each competency resulted in an Average Rating. Competency levels were then determined using a table of average-item scores equivalent to high, medium, and low competency levels (Hay Group, 2005, p. 7).

Table C4. Emotional intelligence competencies, average ratings and levels – principal 4

Cluster	Competency	Average Rating	Competency Level
Self-Awareness	Accurate Self-Assessment	4.45	**High**
Self-Awareness	Emotional Self-Awareness	4.31	**High**
Self-Awareness	Self-Confidence	4.25	Medium
Self-Management	Achievement Orientation	3.95	Medium
Self-Management	Adaptability	4.09	**High**
Self-Management	Emotional Self-Control	4.36	**High**
Self-Management	Initiative	4.14	**High**
Self-Management	Optimism	4.55	**High**
Self-Management	Transparency	4.43	**High**
Social Awareness	Empathy	4.05	Medium
Social Awareness	Organizational Awareness	3.68	Medium
Social Awareness	Service Orientation	4.38	Medium
Relationship Management	Change Catalyst	4.00	**High**
Relationship Management	Conflict Management	3.22	Medium
Relationship Management	Developing Others	3.94	Medium
Relationship Management	Influence	3.63	Medium
Relationship Management	Inspirational Leadership	3.75	Medium
Relationship Management	Teamwork & Collaboration	4.24	Medium

Note. Scores (ranging from 1 to 5) for each question, from each respondent, resulted in an average for each question. An average of the four questions in each competency resulted in an Average Rating. Competency levels were then determined using a table of average-item scores equivalent to high, medium, and low competency levels (Hay Group, 2005, p. 7).

Table C5. Emotional intelligence competencies, average ratings and levels – principal 5

Cluster	Competency	Average Rating	Competency Level
Self-Awareness	Accurate Self-Assessment	4.32	**High**
Self-Awareness	Emotional Self-Awareness	4.64	**High**
Self-Awareness	Self-Confidence	4.86	**High**
Self-Management	Achievement Orientation	4.70	**High**
Self-Management	Adaptability	4.55	**High**
Self-Management	Emotional Self-Control	4.27	**High**
Self-Management	Initiative	4.10	**High**
Self-Management	Optimism	4.86	**High**
Self-Management	Transparency	4.48	**High**
Social Awareness	Empathy	4.66	**High**
Social Awareness	Organizational Awareness	4.73	**High**
Social Awareness	Service Orientation	4.63	**High**
Relationship Management	Change Catalyst	4.70	**High**
Relationship Management	Conflict Management	3.50	**High**
Relationship Management	Developing Others	4.74	**High**
Relationship Management	Influence	4.54	**High**
Relationship Management	Inspirational Leadership	4.64	**High**
Relationship Management	Teamwork & Collaboration	4.52	**High**

Note. Scores (ranging from 1 to 5) for each question, from each respondent, resulted in an average for each question. An average of the four questions in each competency resulted in an Average Rating. Competency levels were then determined using a table of average-item scores equivalent to high, medium, and low competency levels (Hay Group, 2005, p. 7).

Table C6. Emotional intelligence competencies, average ratings and levels – principal 6

Cluster	Competency	Average Rating	Competency Level
Self-Awareness	Accurate Self-Assessment	3.67	Medium
Self-Awareness	Emotional Self-Awareness	4.00	**High**
Self-Awareness	Self-Confidence	4.42	Medium
Self-Management	Achievement Orientation	4.17	**High**
Self-Management	Adaptability	4.25	**High**
Self-Management	Emotional Self-Control	3.83	Medium
Self-Management	Initiative	4.00	**High**
Self-Management	Optimism	4.17	Medium
Self-Management	Transparency	3.92	**High**
Social Awareness	Empathy	3.83	Low
Social Awareness	Organizational Awareness	4.08	**High**
Social Awareness	Service Orientation	4.17	Medium
Relationship Management	Change Catalyst	4.00	**High**
Relationship Management	Conflict Management	3.38	**High**
Relationship Management	Developing Others	3.75	Medium
Relationship Management	Influence	4.33	**High**
Relationship Management	Inspirational Leadership	3.83	Medium
Relationship Management	Teamwork & Collaboration	3.58	Low

Note. Scores (ranging from 1 to 5) for each question, from each respondent, resulted in an average for each question. An average of the four questions in each competency resulted in an Average Rating. Competency levels were then determined using a table of average-item scores equivalent to high, medium, and low competency levels (Hay Group, 2005, p. 7).

Table C7. Emotional intelligence competencies, average ratings and levels – principal 7

Cluster	Competency	Average Rating	Competency Level
Self-Awareness	Accurate Self-Assessment	4.34	**High**
Self-Awareness	Emotional Self-Awareness	4.30	**High**
Self-Awareness	Self-Confidence	4.75	**High**
Self-Management	Achievement Orientation	4.58	**High**
Self-Management	Adaptability	4.48	**High**
Self-Management	Emotional Self-Control	4.28	**High**
Self-Management	Initiative	3.55	Medium
Self-Management	Optimism	4.64	**High**
Self-Management	Transparency	4.39	**High**
Social Awareness	Empathy	4.25	**High**
Social Awareness	Organizational Awareness	4.26	**High**
Social Awareness	Service Orientation	4.42	**High**
Relationship Management	Change Catalyst	4.09	**High**
Relationship Management	Conflict Management	3.26	Medium
Relationship Management	Developing Others	4.59	**High**
Relationship Management	Influence	4.50	**High**
Relationship Management	Inspirational Leadership	4.47	**High**
Relationship Management	Teamwork & Collaboration	4.38	**High**

Note. Scores (ranging from 1 to 5) for each question, from each respondent, resulted in an average for each question. An average of the four questions in each competency resulted in an Average Rating. Competency levels were then determined using a table of average-item scores equivalent to high, medium, and low competency levels (Hay Group, 2005, p. 7).

Table C8. Emotional intelligence competencies, average ratings and levels – principal 8

Cluster	Competency	Average Rating	Competency Level
Self-Awareness	Accurate Self-Assessment	4.21	**High**
Self-Awareness	Emotional Self-Awareness	4.77	**High**
Self-Awareness	Self-Confidence	4.73	**High**
Self-Management	Achievement Orientation	4.69	**High**
Self-Management	Adaptability	4.44	**High**
Self-Management	Emotional Self-Control	4.25	**High**
Self-Management	Initiative	4.13	**High**
Self-Management	Optimism	4.81	**High**
Self-Management	Transparency	4.38	**High**
Social Awareness	Empathy	4.31	**High**
Social Awareness	Organizational Awareness	4.56	**High**
Social Awareness	Service Orientation	4.56	**High**
Relationship Management	Change Catalyst	4.56	**High**
Relationship Management	Conflict Management	4.06	**High**
Relationship Management	Developing Others	4.25	**High**
Relationship Management	Influence	4.44	**High**
Relationship Management	Inspirational Leadership	5.00	**High**
Relationship Management	Teamwork & Collaboration	4.75	**High**

Note. Scores (ranging from 1 to 5) for each question, from each respondent, resulted in an average for each question. An average of the four questions in each competency resulted in an Average Rating. Competency levels were then determined using a table of average-item scores equivalent to high, medium, and low competency levels (Hay Group, 2005, p. 7).

Table C9. Emotional intelligence competencies, average ratings and levels – principal 9

Cluster	Competency	Average Rating	Competency Level
Self-Awareness	Accurate Self-Assessment	4.54	**High**
Self-Awareness	Emotional Self-Awareness	4.42	**High**
Self-Awareness	Self-Confidence	4.58	**High**
Self-Management	Achievement Orientation	4.46	**High**
Self-Management	Adaptability	4.33	**High**
Self-Management	Emotional Self-Control	3.79	Medium
Self-Management	Initiative	4.30	**High**
Self-Management	Optimism	4.63	**High**
Self-Management	Transparency	4.27	**High**
Social Awareness	Empathy	4.38	**High**
Social Awareness	Organizational Awareness	4.07	**High**
Social Awareness	Service Orientation	4.52	**High**
Relationship Management	Change Catalyst	4.09	**High**
Relationship Management	Conflict Management	3.53	**High**
Relationship Management	Developing Others	4.40	**High**
Relationship Management	Influence	4.38	**High**
Relationship Management	Inspirational Leadership	4.44	**High**
Relationship Management	Teamwork & Collaboration	4.60	**High**

Note. Scores (ranging from 1 to 5) for each question, from each respondent, resulted in an average for each question. An average of the four questions in each competency resulted in an Average Rating. Competency levels were then determined using a table of average-item scores equivalent to high, medium, and low competency levels (Hay Group, 2005, p. 7).

Table C10. Emotional intelligence competencies, average ratings and levels – principal 10

Cluster	Competency	Average Rating	Competency Level
Self-Awareness	Accurate Self-Assessment	3.74	Medium
Self-Awareness	Emotional Self-Awareness	3.84	**High**
Self-Awareness	Self-Confidence	4.30	Medium
Self-Management	Achievement Orientation	4.05	**High**
Self-Management	Adaptability	4.40	**High**
Self-Management	Emotional Self-Control	4.15	**High**
Self-Management	Initiative	3.77	**High**
Self-Management	Optimism	4.24	Medium
Self-Management	Transparency	3.63	Medium
Social Awareness	Empathy	3.99	Medium
Social Awareness	Organizational Awareness	4.38	**High**
Social Awareness	Service Orientation	4.55	**High**
Relationship Management	Change Catalyst	3.60	Low
Relationship Management	Conflict Management	3.11	Medium
Relationship Management	Developing Others	3.95	Medium
Relationship Management	Influence	4.04	**High**
Relationship Management	Inspirational Leadership	4.10	**High**
Relationship Management	Teamwork & Collaboration	4.20	Medium

Note. Scores (ranging from 1 to 5) for each question, from each respondent, resulted in an average for each question. An average of the four questions in each competency resulted in an Average Rating. Competency levels were then determined using a table of average-item scores equivalent to high, medium, and low competency levels (Hay Group, 2005, p. 7).

Table C11. Emotional intelligence competencies, average ratings and levels – principal 11

Cluster	Competency	Average Rating	Competency Level
Self-Awareness	Accurate Self-Assessment	4.81	**High**
Self-Awareness	Emotional Self-Awareness	4.35	**High**
Self-Awareness	Self-Confidence	4.81	**High**
Self-Management	Achievement Orientation	4.94	**High**
Self-Management	Adaptability	4.69	**High**
Self-Management	Emotional Self-Control	4.75	**High**
Self-Management	Initiative	4.46	**High**
Self-Management	Optimism	4.88	**High**
Self-Management	Transparency	4.25	**High**
Social Awareness	Empathy	4.63	**High**
Social Awareness	Organizational Awareness	4.56	**High**
Social Awareness	Service Orientation	4.75	**High**
Relationship Management	Change Catalyst	4.38	**High**
Relationship Management	Conflict Management	3.21	Medium
Relationship Management	Developing Others	4.81	**High**
Relationship Management	Influence	4.69	**High**
Relationship Management	Inspirational Leadership	4.81	**High**
Relationship Management	Teamwork & Collaboration	4.81	**High**

Note. Scores (ranging from 1 to 5) for each question, from each respondent, resulted in an average for each question. An average of the four questions in each competency resulted in an Average Rating. Competency levels were then determined using a table of average-item scores equivalent to high, medium, and low competency levels (Hay Group, 2005, p. 7).

Table C12. Emotional intelligence competencies, average ratings and levels – principal 12

Cluster	Competency	Average Rating	Competency Level
Self-Awareness	Accurate Self-Assessment	4.34	**High**
Self-Awareness	Emotional Self-Awareness	4.60	**High**
Self-Awareness	Self-Confidence	4.63	**High**
Self-Management	Achievement Orientation	4.75	**High**
Self-Management	Adaptability	4.47	**High**
Self-Management	Emotional Self-Control	4.01	Medium
Self-Management	Initiative	4.52	**High**
Self-Management	Optimism	4.73	**High**
Self-Management	Transparency	4.53	**High**
Social Awareness	Empathy	4.61	**High**
Social Awareness	Organizational Awareness	4.50	**High**
Social Awareness	Service Orientation	4.80	**High**
Relationship Management	Change Catalyst	4.56	**High**
Relationship Management	Conflict Management	4.04	**High**
Relationship Management	Developing Others	4.60	**High**
Relationship Management	Influence	4.73	**High**
Relationship Management	Inspirational Leadership	4.75	**High**
Relationship Management	Teamwork & Collaboration	4.63	**High**

Note. Scores (ranging from 1 to 5) for each question, from each respondent, resulted in an average for each question. An average of the four questions in each competency resulted in an Average Rating. Competency levels were then determined using a table of average-item scores equivalent to high, medium, and low competency levels (Hay Group, 2005, p. 7).

Table C13. Emotional intelligence competencies, average ratings and levels – principal 13

Cluster	Competency	Average Rating	Competency Level
Self-Awareness	Accurate Self-Assessment	4.42	**High**
Self-Awareness	Emotional Self-Awareness	4.50	**High**
Self-Awareness	Self-Confidence	4.50	**High**
Self-Management	Achievement Orientation	4.58	**High**
Self-Management	Adaptability	4.29	**High**
Self-Management	Emotional Self-Control	4.33	**High**
Self-Management	Initiative	3.67	**High**
Self-Management	Optimism	4.67	**High**
Self-Management	Transparency	4.50	**High**
Social Awareness	Empathy	4.58	**High**
Social Awareness	Organizational Awareness	4.71	**High**
Social Awareness	Service Orientation	4.33	Medium
Relationship Management	Change Catalyst	4.17	**High**
Relationship Management	Conflict Management	3.42	**High**
Relationship Management	Developing Others	4.25	**High**
Relationship Management	Influence	4.42	**High**
Relationship Management	Inspirational Leadership	4.58	**High**
Relationship Management	Teamwork & Collaboration	4.50	**High**

Note. Scores (ranging from 1 to 5) for each question, from each respondent, resulted in an average for each question. An average of the four questions in each competency resulted in an Average Rating. Competency levels were then determined using a table of average-item scores equivalent to high, medium, and low competency levels (Hay Group, 2005, p. 7).

Table C14. Emotional intelligence competencies, average ratings and levels – principal 14

Cluster	Competency	Average Rating	Competency Level
Self-Awareness	Accurate Self-Assessment	4.46	**High**
Self-Awareness	Emotional Self-Awareness	4.12	**High**
Self-Awareness	Self-Confidence	4.17	**High**
Self-Management	Achievement Orientation	4.29	**High**
Self-Management	Adaptability	4.46	**High**
Self-Management	Emotional Self-Control	3.88	Medium
Self-Management	Initiative	4.21	**High**
Self-Management	Optimism	4.61	**High**
Self-Management	Transparency	3.83	Medium
Social Awareness	Empathy	4.33	**High**
Social Awareness	Organizational Awareness	3.92	Medium
Social Awareness	Service Orientation	3.98	Low
Relationship Management	Change Catalyst	4.17	**High**
Relationship Management	Conflict Management	3.58	**High**
Relationship Management	Developing Others	4.29	**High**
Relationship Management	Influence	3.92	**High**
Relationship Management	Inspirational Leadership	4.29	**High**
Relationship Management	Teamwork & Collaboration	4.38	**High**

Note. Scores (ranging from 1 to 5) for each question, from each respondent, resulted in an average for each question. An average of the four questions in each competency resulted in an Average Rating. Competency levels were then determined using a table of average-item scores equivalent to high, medium, and low competency levels (Hay Group, 2005, p. 7).

Table C15. Emotional intelligence competencies, average ratings and levels – principal 15

Cluster	Competency	Average Rating	Competency Level
Self-Awareness	Accurate Self-Assessment	4.59	**High**
Self-Awareness	Emotional Self-Awareness	4.60	**High**
Self-Awareness	Self-Confidence	4.77	**High**
Self-Management	Achievement Orientation	4.60	**High**
Self-Management	Adaptability	4.56	**High**
Self-Management	Emotional Self-Control	4.51	**High**
Self-Management	Initiative	4.08	**High**
Self-Management	Optimism	4.80	**High**
Self-Management	Transparency	4.25	**High**
Social Awareness	Empathy	4.61	**High**
Social Awareness	Organizational Awareness	4.48	**High**
Social Awareness	Service Orientation	4.56	**High**
Relationship Management	Change Catalyst	4.20	**High**
Relationship Management	Conflict Management	3.66	**High**
Relationship Management	Developing Others	4.55	**High**
Relationship Management	Influence	4.56	**High**
Relationship Management	Inspirational Leadership	4.64	**High**
Relationship Management	Teamwork & Collaboration	4.68	**High**

Note. Scores (ranging from 1 to 5) for each question, from each respondent, resulted in an average for each question. An average of the four questions in each competency resulted in an Average Rating. Competency levels were then determined using a table of average-item scores equivalent to high, medium, and low competency levels (Hay Group, 2005, p. 7).

Table C16. Emotional intelligence competencies, average ratings and levels – principal 16

Cluster	Competency	Average Rating	Competency Level
Self-Awareness	Accurate Self-Assessment	4.00	**High**
Self-Awareness	Emotional Self-Awareness	4.17	**High**
Self-Awareness	Self-Confidence	4.67	**High**
Self-Management	Achievement Orientation	4.50	**High**
Self-Management	Adaptability	4.33	**High**
Self-Management	Emotional Self-Control	3.92	Medium
Self-Management	Initiative	3.92	**High**
Self-Management	Optimism	4.58	**High**
Self-Management	Transparency	4.33	**High**
Social Awareness	Empathy	4.75	**High**
Social Awareness	Organizational Awareness	4.63	**High**
Social Awareness	Service Orientation	4.29	Medium
Relationship Management	Change Catalyst	4.33	**High**
Relationship Management	Conflict Management	3.33	**High**
Relationship Management	Developing Others	4.58	**High**
Relationship Management	Influence	4.17	**High**
Relationship Management	Inspirational Leadership	4.42	**High**
Relationship Management	Teamwork & Collaboration	4.42	**High**

Note. Scores (ranging from 1 to 5) for each question, from each respondent, resulted in an average for each question. An average of the four questions in each competency resulted in an Average Rating. Competency levels were then determined using a table of average-item scores equivalent to high, medium, and low competency levels (Hay Group, 2005, p. 7).

Table C17. Emotional intelligence competencies, average ratings and levels – principal 17

Cluster	Competency	Average Rating	Competency Level
Self-Awareness	Accurate Self-Assessment	3.88	Medium
Self-Awareness	Emotional Self-Awareness	4.54	**High**
Self-Awareness	Self-Confidence	4.63	**High**
Self-Management	Achievement Orientation	4.75	**High**
Self-Management	Adaptability	4.50	**High**
Self-Management	Emotional Self-Control	4.56	**High**
Self-Management	Initiative	4.13	**High**
Self-Management	Optimism	4.94	**High**
Self-Management	Transparency	4.04	**High**
Social Awareness	Empathy	4.25	**High**
Social Awareness	Organizational Awareness	4.69	**High**
Social Awareness	Service Orientation	4.69	**High**
Relationship Management	Change Catalyst	4.19	**High**
Relationship Management	Conflict Management	3.75	**High**
Relationship Management	Developing Others	4.31	**High**
Relationship Management	Influence	4.38	**High**
Relationship Management	Inspirational Leadership	4.56	**High**
Relationship Management	Teamwork & Collaboration	4.31	**High**

Note. Scores (ranging from 1 to 5) for each question, from each respondent, resulted in an average for each question. An average of the four questions in each competency resulted in an Average Rating. Competency levels were then determined using a table of average-item scores equivalent to high, medium, and low competency levels (Hay Group, 2005, p. 7).

Table C18. Emotional intelligence competencies, average ratings and levels – principal 18

Cluster	Competency	Average Rating	Competency Level
Self-Awareness	Accurate Self-Assessment	4.25	**High**
Self-Awareness	Emotional Self-Awareness	4.35	**High**
Self-Awareness	Self-Confidence	4.74	**High**
Self-Management	Achievement Orientation	4.55	**High**
Self-Management	Adaptability	4.00	**High**
Self-Management	Emotional Self-Control	3.40	Low
Self-Management	Initiative	3.75	**High**
Self-Management	Optimism	4.41	**High**
Self-Management	Transparency	4.18	**High**
Social Awareness	Empathy	4.40	**High**
Social Awareness	Organizational Awareness	4.38	**High**
Social Awareness	Service Orientation	4.48	**High**
Relationship Management	Change Catalyst	4.05	**High**
Relationship Management	Conflict Management	3.60	**High**
Relationship Management	Developing Others	4.20	**High**
Relationship Management	Influence	4.40	**High**
Relationship Management	Inspirational Leadership	4.40	**High**
Relationship Management	Teamwork & Collaboration	4.50	**High**

Note. Scores (ranging from 1 to 5) for each question, from each respondent, resulted in an average for each question. An average of the four questions in each competency resulted in an Average Rating. Competency levels were then determined using a table of average-item scores equivalent to high, medium, and low competency levels (Hay Group, 2005, p. 7).

Table C19. Emotional intelligence competencies, average ratings and levels – principal 19

Cluster	Competency	Average Rating	Competency Level
Self-Awareness	Accurate Self-Assessment	4.78	**High**
Self-Awareness	Emotional Self-Awareness	4.83	**High**
Self-Awareness	Self-Confidence	4.90	**High**
Self-Management	Achievement Orientation	4.80	**High**
Self-Management	Adaptability	4.87	**High**
Self-Management	Emotional Self-Control	4.55	**High**
Self-Management	Initiative	4.20	**High**
Self-Management	Optimism	4.88	**High**
Self-Management	Transparency	4.75	**High**
Social Awareness	Empathy	4.90	**High**
Social Awareness	Organizational Awareness	4.63	**High**
Social Awareness	Service Orientation	4.76	**High**
Relationship Management	Change Catalyst	4.60	**High**
Relationship Management	Conflict Management	3.71	**High**
Relationship Management	Developing Others	4.75	**High**
Relationship Management	Influence	4.36	**High**
Relationship Management	Inspirational Leadership	4.75	**High**
Relationship Management	Teamwork & Collaboration	4.80	**High**

Note. Scores (ranging from 1 to 5) for each question, from each respondent, resulted in an average for each question. An average of the four questions in each competency resulted in an Average Rating. Competency levels were then determined using a table of average-item scores equivalent to high, medium, and low competency levels (Hay Group, 2005, p. 7).

Table C20. Emotional intelligence competencies, average ratings and levels – principal 20

Cluster	Competency	Average Rating	Competency Level
Self-Awareness	Accurate Self-Assessment	4.36	**High**
Self-Awareness	Emotional Self-Awareness	3.73	**High**
Self-Awareness	Self-Confidence	4.43	Medium
Self-Management	Achievement Orientation	4.11	**High**
Self-Management	Adaptability	4.07	**High**
Self-Management	Emotional Self-Control	4.21	**High**
Self-Management	Initiative	3.79	**High**
Self-Management	Optimism	4.64	**High**
Self-Management	Transparency	4.06	**High**
Social Awareness	Empathy	4.18	Medium
Social Awareness	Organizational Awareness	4.17	**High**
Social Awareness	Service Orientation	4.32	Medium
Relationship Management	Change Catalyst	4.21	**High**
Relationship Management	Conflict Management	3.40	**High**
Relationship Management	Developing Others	3.92	Medium
Relationship Management	Influence	4.11	**High**
Relationship Management	Inspirational Leadership	4.07	Medium
Relationship Management	Teamwork & Collaboration	4.54	**High**

Note. Scores (ranging from 1 to 5) for each question, from each respondent, resulted in an average for each question. An average of the four questions in each competency resulted in an Average Rating. Competency levels were then determined using a table of average-item scores equivalent to high, medium, and low competency levels (Hay Group, 2005, p. 7).

Table C21. Emotional intelligence competencies, average ratings and levels – principal 21

Cluster	Competency	Average Rating	Competency Level
Self-Awareness	Accurate Self-Assessment	4.56	**High**
Self-Awareness	Emotional Self-Awareness	4.56	**High**
Self-Awareness	Self-Confidence	4.50	**High**
Self-Management	Achievement Orientation	4.44	**High**
Self-Management	Adaptability	4.40	**High**
Self-Management	Emotional Self-Control	4.63	**High**
Self-Management	Initiative	3.90	**High**
Self-Management	Optimism	4.85	**High**
Self-Management	Transparency	4.25	**High**
Social Awareness	Empathy	4.58	**High**
Social Awareness	Organizational Awareness	4.23	**High**
Social Awareness	Service Orientation	4.23	Medium
Relationship Management	Change Catalyst	4.19	**High**
Relationship Management	Conflict Management	3.35	**High**
Relationship Management	Developing Others	4.10	**High**
Relationship Management	Influence	4.10	**High**
Relationship Management	Inspirational Leadership	4.31	**High**
Relationship Management	Teamwork & Collaboration	4.44	**High**

Note. Scores (ranging from 1 to 5) for each question, from each respondent, resulted in an average for each question. An average of the four questions in each competency resulted in an Average Rating. Competency levels were then determined using a table of average-item scores equivalent to high, medium, and low competency levels (Hay Group, 2005, p. 7).

Table C22. Emotional intelligence competencies, average ratings and levels – principal 22

Cluster	Competency	Average Rating	Competency Level
Self-Awareness	Accurate Self-Assessment	3.94	**High**
Self-Awareness	Emotional Self-Awareness	4.08	**High**
Self-Awareness	Self-Confidence	4.40	Medium
Self-Management	Achievement Orientation	4.19	**High**
Self-Management	Adaptability	4.25	**High**
Self-Management	Emotional Self-Control	4.10	**High**
Self-Management	Initiative	3.94	**High**
Self-Management	Optimism	4.10	Medium
Self-Management	Transparency	3.38	Low
Social Awareness	Empathy	4.69	**High**
Social Awareness	Organizational Awareness	4.00	Medium
Social Awareness	Service Orientation	4.38	Medium
Relationship Management	Change Catalyst	4.06	**High**
Relationship Management	Conflict Management	2.88	Low
Relationship Management	Developing Others	4.31	**High**
Relationship Management	Influence	4.25	**High**
Relationship Management	Inspirational Leadership	4.31	**High**
Relationship Management	Teamwork & Collaboration	4.29	**High**

Note. Scores (ranging from 1 to 5) for each question, from each respondent, resulted in an average for each question. An average of the four questions in each competency resulted in an Average Rating. Competency levels were then determined using a table of average-item scores equivalent to high, medium, and low competency levels (Hay Group, 2005, p. 7).

Table C23. Emotional intelligence competencies, average ratings and levels – principal 23

Cluster	Competency	Average Rating	Competency Level
Self-Awareness	Accurate Self-Assessment	4.75	**High**
Self-Awareness	Emotional Self-Awareness	4.38	**High**
Self-Awareness	Self-Confidence	5.00	**High**
Self-Management	Achievement Orientation	4.67	**High**
Self-Management	Adaptability	4.71	**High**
Self-Management	Emotional Self-Control	4.75	**High**
Self-Management	Initiative	3.83	**High**
Self-Management	Optimism	4.83	**High**
Self-Management	Transparency	4.21	**High**
Social Awareness	Empathy	4.75	**High**
Social Awareness	Organizational Awareness	4.42	**High**
Social Awareness	Service Orientation	4.79	**High**
Relationship Management	Change Catalyst	4.33	**High**
Relationship Management	Conflict Management	3.83	**High**
Relationship Management	Developing Others	4.75	**High**
Relationship Management	Influence	4.67	**High**
Relationship Management	Inspirational Leadership	4.92	**High**
Relationship Management	Teamwork & Collaboration	4.83	**High**

Note. Scores (ranging from 1 to 5) for each question, from each respondent, resulted in an average for each question. An average of the four questions in each competency resulted in an Average Rating. Competency levels were then determined using a table of average-item scores equivalent to high, medium, and low competency levels (Hay Group, 2005, p. 7).

Table C24. Emotional intelligence competencies, average ratings and levels – principal 24

Cluster	Competency	Average Rating	Competency Level
Self-Awareness	Accurate Self-Assessment	4.13	**High**
Self-Awareness	Emotional Self-Awareness	3.90	**High**
Self-Awareness	Self-Confidence	4.00	Low
Self-Management	Achievement Orientation	3.81	Medium
Self-Management	Adaptability	3.81	Medium
Self-Management	Emotional Self-Control	4.00	Medium
Self-Management	Initiative	3.52	Medium
Self-Management	Optimism	4.44	**High**
Self-Management	Transparency	3.81	Medium
Social Awareness	Empathy	4.19	Medium
Social Awareness	Organizational Awareness	3.48	Low
Social Awareness	Service Orientation	4.00	Low
Relationship Management	Change Catalyst	4.06	**High**
Relationship Management	Conflict Management	3.25	Medium
Relationship Management	Developing Others	4.00	Medium
Relationship Management	Influence	3.69	Medium
Relationship Management	Inspirational Leadership	3.94	Medium
Relationship Management	Teamwork & Collaboration	4.13	Medium

Note. Scores (ranging from 1 to 5) for each question, from each respondent, resulted in an average for each question. An average of the four questions in each competency resulted in an Average Rating. Competency levels were then determined using a table of average-item scores equivalent to high, medium, and low competency levels (Hay Group, 2005, p. 7).

Table C25. Emotional intelligence competencies, average ratings and levels – principal 25

Cluster	Competency	Average Rating	Competency Level
Self-Awareness	Accurate Self-Assessment	4.24	**High**
Self-Awareness	Emotional Self-Awareness	4.05	**High**
Self-Awareness	Self-Confidence	4.40	Medium
Self-Management	Achievement Orientation	4.02	Medium
Self-Management	Adaptability	3.97	Medium
Self-Management	Emotional Self-Control	3.96	Medium
Self-Management	Initiative	3.65	**High**
Self-Management	Optimism	4.27	**High**
Self-Management	Transparency	3.81	Medium
Social Awareness	Empathy	4.00	Medium
Social Awareness	Organizational Awareness	3.73	Medium
Social Awareness	Service Orientation	4.12	Medium
Relationship Management	Change Catalyst	4.04	**High**
Relationship Management	Conflict Management	2.87	Low
Relationship Management	Developing Others	4.00	Medium
Relationship Management	Influence	4.02	**High**
Relationship Management	Inspirational Leadership	3.94	Medium
Relationship Management	Teamwork & Collaboration	4.15	Medium

Note. Scores (ranging from 1 to 5) for each question, from each respondent, resulted in an average for each question. An average of the four questions in each competency resulted in an Average Rating. Competency levels were then determined using a table of average-item scores equivalent to high, medium, and low competency levels (Hay Group, 2005, p. 7).

Table C26. Emotional intelligence competencies, average ratings and levels – principal 26

Cluster	Competency	Average Rating	Competency Level
Self-Awareness	Accurate Self-Assessment	4.12	**High**
Self-Awareness	Emotional Self-Awareness	4.10	**High**
Self-Awareness	Self-Confidence	4.38	**High**
Self-Management	Achievement Orientation	4.05	**High**
Self-Management	Adaptability	4.05	**High**
Self-Management	Emotional Self-Control	3.69	Low
Self-Management	Initiative	3.83	**High**
Self-Management	Optimism	4.39	**High**
Self-Management	Transparency	4.09	**High**
Social Awareness	Empathy	4.03	Medium
Social Awareness	Organizational Awareness	4.03	**High**
Social Awareness	Service Orientation	4.33	Medium
Relationship Management	Change Catalyst	3.84	Medium
Relationship Management	Conflict Management	3.37	**High**
Relationship Management	Developing Others	3.75	Medium
Relationship Management	Influence	4.04	**High**
Relationship Management	Inspirational Leadership	3.99	Medium
Relationship Management	Teamwork & Collaboration	4.23	Medium

Note. Scores (ranging from 1 to 5) for each question, from each respondent, resulted in an average for each question. An average of the four questions in each competency resulted in an Average Rating. Competency levels were then determined using a table of average-item scores equivalent to high, medium, and low competency levels (Hay Group, 2005, p. 7).

Table C27. Emotional intelligence competencies, average ratings and levels – principal 27

Cluster	Competency	Average Rating	Competency Level
Self-Awareness	Accurate Self-Assessment	4.55	**High**
Self-Awareness	Emotional Self-Awareness	4.73	**High**
Self-Awareness	Self-Confidence	4.85	**High**
Self-Management	Achievement Orientation	4.54	**High**
Self-Management	Adaptability	4.68	**High**
Self-Management	Emotional Self-Control	4.60	**High**
Self-Management	Initiative	4.36	**High**
Self-Management	Optimism	4.83	**High**
Self-Management	Transparency	4.61	**High**
Social Awareness	Empathy	4.69	**High**
Social Awareness	Organizational Awareness	4.39	**High**
Social Awareness	Service Orientation	4.74	**High**
Relationship Management	Change Catalyst	4.45	**High**
Relationship Management	Conflict Management	3.72	**High**
Relationship Management	Developing Others	4.56	**High**
Relationship Management	Influence	4.32	**High**
Relationship Management	Inspirational Leadership	4.52	**High**
Relationship Management	Teamwork & Collaboration	4.49	**High**

Note. Scores (ranging from 1 to 5) for each question, from each respondent, resulted in an average for each question. An average of the four questions in each competency resulted in an Average Rating. Competency levels were then determined using a table of average-item scores equivalent to high, medium, and low competency levels (Hay Group, 2005, p. 7).

Table C28. Emotional intelligence competencies, average ratings and levels – principal 28

Cluster	Competency	Average Rating	Competency Level
Self-Awareness	Accurate Self-Assessment	4.45	**High**
Self-Awareness	Emotional Self-Awareness	4.43	**High**
Self-Awareness	Self-Confidence	4.55	**High**
Self-Management	Achievement Orientation	4.35	**High**
Self-Management	Adaptability	4.55	**High**
Self-Management	Emotional Self-Control	4.15	**High**
Self-Management	Initiative	4.20	**High**
Self-Management	Optimism	4.75	**High**
Self-Management	Transparency	4.41	**High**
Social Awareness	Empathy	4.35	**High**
Social Awareness	Organizational Awareness	4.40	**High**
Social Awareness	Service Orientation	4.65	**High**
Relationship Management	Change Catalyst	4.45	**High**
Relationship Management	Conflict Management	2.88	Low
Relationship Management	Developing Others	4.60	**High**
Relationship Management	Influence	4.20	**High**
Relationship Management	Inspirational Leadership	4.55	**High**
Relationship Management	Teamwork & Collaboration	4.75	**High**

Note. Scores (ranging from 1 to 5) for each question, from each respondent, resulted in an average for each question. An average of the four questions in each competency resulted in an Average Rating. Competency levels were then determined using a table of average-item scores equivalent to high, medium, and low competency levels (Hay Group, 2005, p. 7).

Table C29. Emotional intelligence competencies, average ratings and levels – principal 29

Cluster	Competency	Average Rating	Competency Level
Self-Awareness	Accurate Self-Assessment	3.50	Low
Self-Awareness	Emotional Self-Awareness	3.67	**High**
Self-Awareness	Self-Confidence	4.50	**High**
Self-Management	Achievement Orientation	4.83	**High**
Self-Management	Adaptability	4.25	**High**
Self-Management	Emotional Self-Control	3.17	Low
Self-Management	Initiative	4.17	**High**
Self-Management	Optimism	4.50	**High**
Self-Management	Transparency	3.58	Medium
Social Awareness	Empathy	3.58	Low
Social Awareness	Organizational Awareness	4.50	**High**
Social Awareness	Service Orientation	4.00	Low
Relationship Management	Change Catalyst	4.67	**High**
Relationship Management	Conflict Management	3.88	**High**
Relationship Management	Developing Others	4.13	**High**
Relationship Management	Influence	4.33	**High**
Relationship Management	Inspirational Leadership	4.00	Medium
Relationship Management	Teamwork & Collaboration	4.00	Medium

Note. Scores (ranging from 1 to 5) for each question, from each respondent, resulted in an average for each question. An average of the four questions in each competency resulted in an Average Rating. Competency levels were then determined using a table of average-item scores equivalent to high, medium, and low competency levels (Hay Group, 2005, p. 7).

Table C30. Emotional intelligence competencies, average ratings and levels – principal 30

Cluster	Competency	Average Rating	Competency Level
Self-Awareness	Accurate Self-Assessment	4.35	**High**
Self-Awareness	Emotional Self-Awareness	4.35	**High**
Self-Awareness	Self-Confidence	4.85	**High**
Self-Management	Achievement Orientation	4.60	**High**
Self-Management	Adaptability	4.45	**High**
Self-Management	Emotional Self-Control	4.50	**High**
Self-Management	Initiative	4.10	**High**
Self-Management	Optimism	4.80	**High**
Self-Management	Transparency	4.32	**High**
Social Awareness	Empathy	4.60	**High**
Social Awareness	Organizational Awareness	4.90	**High**
Social Awareness	Service Orientation	4.80	**High**
Relationship Management	Change Catalyst	4.00	**High**
Relationship Management	Conflict Management	3.15	Medium
Relationship Management	Developing Others	4.65	**High**
Relationship Management	Influence	4.45	**High**
Relationship Management	Inspirational Leadership	4.50	**High**
Relationship Management	Teamwork & Collaboration	4.65	**High**

Note. Scores (ranging from 1 to 5) for each question, from each respondent, resulted in an average for each question. An average of the four questions in each competency resulted in an Average Rating. Competency levels were then determined using a table of average-item scores equivalent to high, medium, and low competency levels (Hay Group, 2005, p. 7).

Table C31. Emotional intelligence competencies, average ratings and levels – principal 31

Cluster	Competency	Average Rating	Competency Level
Self-Awareness	Accurate Self-Assessment	4.20	**High**
Self-Awareness	Emotional Self-Awareness	4.40	**High**
Self-Awareness	Self-Confidence	4.76	**High**
Self-Management	Achievement Orientation	4.55	**High**
Self-Management	Adaptability	4.54	**High**
Self-Management	Emotional Self-Control	4.60	**High**
Self-Management	Initiative	4.00	**High**
Self-Management	Optimism	4.66	**High**
Self-Management	Transparency	4.21	**High**
Social Awareness	Empathy	4.47	**High**
Social Awareness	Organizational Awareness	4.55	**High**
Social Awareness	Service Orientation	4.53	**High**
Relationship Management	Change Catalyst	4.20	**High**
Relationship Management	Conflict Management	3.42	**High**
Relationship Management	Developing Others	4.44	**High**
Relationship Management	Influence	4.40	**High**
Relationship Management	Inspirational Leadership	4.57	**High**
Relationship Management	Teamwork & Collaboration	4.46	**High**

Note. Scores (ranging from 1 to 5) for each question, from each respondent, resulted in an average for each question. An average of the four questions in each competency resulted in an Average Rating. Competency levels were then determined using a table of average-item scores equivalent to high, medium, and low competency levels (Hay Group, 2005, p. 7).

Table C32. Emotional intelligence competencies, average ratings and levels – principal 32

Cluster	Competency	Average Rating	Competency Level
Self-Awareness	Accurate Self-Assessment	3.92	Medium
Self-Awareness	Emotional Self-Awareness	3.79	**High**
Self-Awareness	Self-Confidence	4.25	Medium
Self-Management	Achievement Orientation	4.33	**High**
Self-Management	Adaptability	3.67	Low
Self-Management	Emotional Self-Control	3.67	Low
Self-Management	Initiative	3.29	Low
Self-Management	Optimism	4.17	Medium
Self-Management	Transparency	4.17	**High**
Social Awareness	Empathy	3.96	Medium
Social Awareness	Organizational Awareness	3.79	Medium
Social Awareness	Service Orientation	4.29	Medium
Relationship Management	Change Catalyst	4.00	**High**
Relationship Management	Conflict Management	3.38	**High**
Relationship Management	Developing Others	3.75	Medium
Relationship Management	Influence	3.92	**High**
Relationship Management	Inspirational Leadership	3.75	Medium
Relationship Management	Teamwork & Collaboration	4.00	Medium

Note. Scores (ranging from 1 to 5) for each question, from each respondent, resulted in an average for each question. An average of the four questions in each competency resulted in an Average Rating. Competency levels were then determined using a table of average-item scores equivalent to high, medium, and low competency levels (Hay Group, 2005, p. 7).

Table C33. Emotional intelligence competencies, average ratings and levels – principal 33

Cluster	Competency	Average Rating	Competency Level
Self-Awareness	Accurate Self-Assessment	4.50	**High**
Self-Awareness	Emotional Self-Awareness	4.40	**High**
Self-Awareness	Self-Confidence	4.88	**High**
Self-Management	Achievement Orientation	4.56	**High**
Self-Management	Adaptability	4.50	**High**
Self-Management	Emotional Self-Control	4.81	**High**
Self-Management	Initiative	3.69	**High**
Self-Management	Optimism	4.69	**High**
Self-Management	Transparency	4.38	**High**
Social Awareness	Empathy	4.54	**High**
Social Awareness	Organizational Awareness	4.44	**High**
Social Awareness	Service Orientation	4.65	**High**
Relationship Management	Change Catalyst	4.00	**High**
Relationship Management	Conflict Management	2.38	Low
Relationship Management	Developing Others	4.88	**High**
Relationship Management	Influence	4.56	**High**
Relationship Management	Inspirational Leadership	4.75	**High**
Relationship Management	Teamwork & Collaboration	4.50	**High**

Note. Scores (ranging from 1 to 5) for each question, from each respondent, resulted in an average for each question. An average of the four questions in each competency resulted in an Average Rating. Competency levels were then determined using a table of average-item scores equivalent to high, medium, and low competency levels (Hay Group, 2005, p. 7).

Table C34. Emotional intelligence competencies, average ratings and levels – principal 34

Cluster	Competency	Average Rating	Competency Level
Self-Awareness	Accurate Self-Assessment	3.31	Low
Self-Awareness	Emotional Self-Awareness	3.88	**High**
Self-Awareness	Self-Confidence	4.25	Medium
Self-Management	Achievement Orientation	4.50	**High**
Self-Management	Adaptability	3.94	Medium
Self-Management	Emotional Self-Control	3.75	Low
Self-Management	Initiative	3.90	**High**
Self-Management	Optimism	4.38	**High**
Self-Management	Transparency	4.17	**High**
Social Awareness	Empathy	3.88	Low
Social Awareness	Organizational Awareness	4.06	**High**
Social Awareness	Service Orientation	4.44	**High**
Relationship Management	Change Catalyst	3.69	Medium
Relationship Management	Conflict Management	3.81	**High**
Relationship Management	Developing Others	4.44	**High**
Relationship Management	Influence	4.00	**High**
Relationship Management	Inspirational Leadership	4.13	**High**
Relationship Management	Teamwork & Collaboration	4.31	**High**

Note. Scores (ranging from 1 to 5) for each question, from each respondent, resulted in an average for each question. An average of the four questions in each competency resulted in an Average Rating. Competency levels were then determined using a table of average-item scores equivalent to high, medium, and low competency levels (Hay Group, 2005, p. 7).

VITA

Michele Gillians Reynolds received her Bachelor's degree in middle school education from the University of Kentucky in 1995. She completed her Master's degree in education as a Reading Specialist at Eastern Kentucky University in 2000, followed by Rank One certifications in Principalship, Superintendency and Supervisor of Instruction in 2006, also at Eastern Kentucky University. During her career in education she has served as a middle school teacher, middle school principal, and as a Highly Skilled Educator for the Kentucky Department of Education. She is currently employed as the Associate Director of Assessment and Data Services for Fayette County Public Schools in Lexington, Kentucky, and will begin a part-time faculty position in the Department of Educational Leadership at Eastern Kentucky University in the fall of 2011.